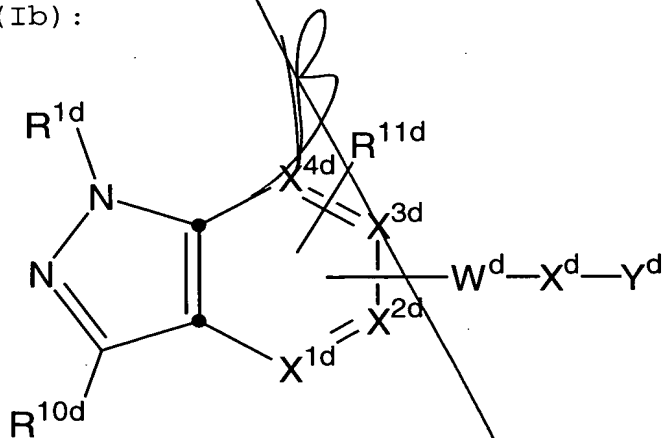


WHAT IS CLAIMED IS DESCRIBED BELOW:

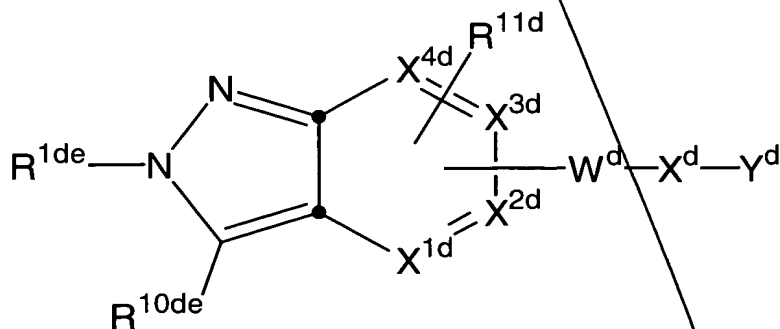
1. A compound, comprising: a targeting moiety and a chelator, wherein the targeting moiety is bound to the chelator, is an indazole nonpeptide, and binds to a receptor that is upregulated during angiogenesis and the compound has 0-1 linking groups between the targeting moiety and chelator.
2. A compound according to Claim 1, wherein the receptor is the integrin $\alpha_v\beta_3$ or $\alpha_v\beta_5$ and the compound is of the formula:



- wherein, Q is independently a compound of Formula (Ia) or (Ib):



(Ia)



(Ib)

including stereoisomeric forms thereof, or mixtures of stereoisomeric forms thereof, or pharmaceutically acceptable salt or prodrug forms thereof wherein:

5 X^{1d} is N, CH, C- W^d - X^d - Y^d , or C- L_n ;

X^{2d} is N, CH, or C- W^d - X^d - Y^d ;

X^{3d} is N, CR^{11d}, or C- W^d - X^d - Y^d ;

X^{4d} is N or CR^{11d}.

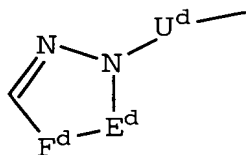
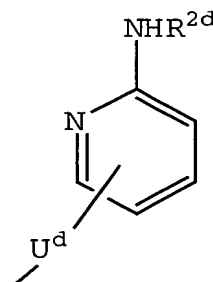
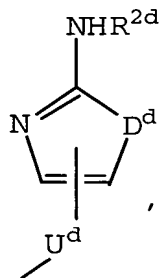
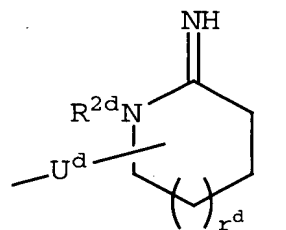
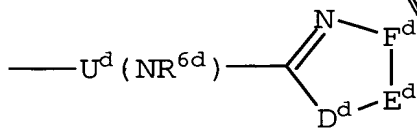
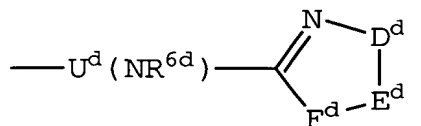
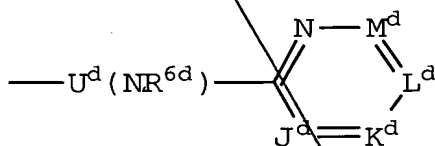
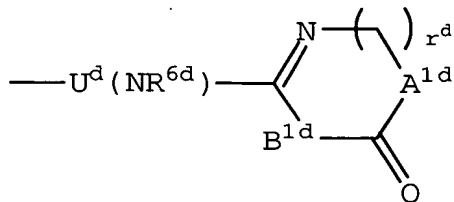
10 provided that when R^{1d} is R^{1de} then one of X^{1d} and X^{2d} is C- W^d - X^d - Y^d , and when R^{10d} is R^{1de} then X^{3d} is C- W^d - X^d - Y^d ;

15 R^{1d} is selected from: R^{1de} , C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d} , C₃-C₆ alkenyl substituted with 0-1 R^{15d} or 0-1 R^{21d} , C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d} , C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d} , aryl substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d} , and
20 aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d} ;

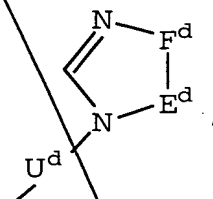
R^{1de} is selected from:

or

A^d and B^d are independently $-CH_2-$, $-O-$, $-N(R^{2d})-$, or



or



A^d and B^d are independently -CH₂-, -O-, -N(R^{2d})-, or -C(=O)-;

A^{1d} and B^{1d} are independently -CH₂- or -N(R^{3d})-;

D^d is -N(R^{2d})-, -O-, -S-, -C(=O)- or -SO₂-;

5

E^d-F^d is -C(R^{4d})=C(R^{5d})-, -N=C(R^{4d})-, -C(R^{4d})=N-, or
-C(R^{4d})₂C(R^{5d})₂-;

J^d, K^d, L^d and M^d are independently selected from

10 -C(R^{4d})-, -C(R^{5d})- and -N-, provided that at least
one of J^d, K^d, L^d and M^d is not -N-;

R^{2d} is selected from: H, C₁-C₆ alkyl, (C₁-C₆
alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl; (C₁-C₆
15 alkyl)aminocarbonyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl,
C₄-C₁₁ cycloalkylalkyl, aryl, heteroaryl(C₁-C₆
alkyl)carbonyl, heteroarylcabonyl,
aryl(C₁-C₆ alkyl)-, (C₁-C₆ alkyl)carbonyl-,
arylcabonyl, C₁-C₆ alkylsulfonyl, arylsulfonyl,
20 aryl(C₁-C₆ alkyl)sulfonyl, heteroarylsulfonyl,
heteroaryl(C₁-C₆ alkyl)sulfonyl, aryloxycarbonyl, and
aryl(C₁-C₆ alkoxy)carbonyl, wherein said aryl groups
are substituted with 0-2 substituents selected from
the group: C₁-C₄ alkyl, C₁-C₄ alkoxy, halo, CF₃, and
25 nitro;

R^{3d} is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,
C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and
heteroaryl(C₁-C₆ alkyl)-;

30

R^{4d} and R^{5d} are independently selected from: H, C₁-C₄
alkoxy, NR^{2d}R^{3d}, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl,
C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁
cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆

alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, and
arylcarbonyl, or

alternatively, when substituents on adjacent atoms, R^{4d}

5 and R^{5d} can be taken together with the carbon atoms
to which they are attached to form a 5-7 membered
carbocyclic or 5-7 membered heterocyclic aromatic or
non-aromatic ring system, said carbocyclic or
heterocyclic ring being optionally substituted with
10 0-2 groups selected from: C₁-C₄ alkyl, C₁-C₄ alkoxy,
halo, cyano, amino, CF₃, and NO₂;

U^d is selected from:

- (CH₂)_{n^d}-,
- 15 - (CH₂)_{n^d}(CR^{7d}=CR^{8d})(CH₂)_{m^d}-,
- (CH₂)_{n^d}(C≡C)(CH₂)_{m^d}-,
- (CH₂)_{t^d}Q(CH₂)_{m^d}-,
- (CH₂)_{n^d}O(CH₂)_{m^d}-,
- (CH₂)_{n^d}N(R^{6d})(CH₂)_{m^d}-,
- 20 - (CH₂)_{n^d}C(=O)(CH₂)_{m^d}-,
- (CH₂)_{n^d}(C=O)N(R^{6d})(CH₂)_{m^d}-,
- (CH₂)_{n^d}N(R^{6d})(C=O)(CH₂)_{m^d}-, and
- (CH₂)_{n^d}S(O)_{p^d}(CH₂)_{m^d}-;

wherein one or more of the methylene groups in U^d is

25 optionally substituted with R^{7d};

Q^d is selected from 1,2-cycloalkylene, 1,2-phenylene,
1,3-phenylene, 1,4-phenylene, 2,3-pyridinylene, 3,4-
pyridinylene, 2,4-pyridinylene, and 3,4-
30 pyridazinylene;

R^{6d} is selected from: H, C₁-C₄ alkyl, and benzyl;

R^{7d} and R^{8d} are independently selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and heteroaryl(C₀-C₆ alkyl)-;

R^{10d} is selected from: H, R^{1de}, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, N(R^{6d})₂, halogen, NO₂, CN, CF₃, CO₂R^{17d}, C(=O)R^{17d}, CONR^{17d}R^{20d}, -SO₂R^{17d}, -SO₂NR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₆ alkenyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, aryl substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

R^{10de} is selected from: H, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, N(R^{6d})₂, halogen, NO₂, CN, CF₃, CO₂R^{17d}, C(=O)R^{17d}, CONR^{17d}R^{20d}, -SO₂R^{17d}, -SO₂NR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₆ alkenyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, aryl substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

R^{11d} is selected from H, halogen, CF₃, CN, NO₂, hydroxy, NR^{2d}R^{3d}, C₁-C₄ alkyl substituted with 0-1 R^{21d}, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, aryl substituted with 0-1 R^{21d}, aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{21d}, (C₁-C₄ alkoxy)carbonyl substituted with 0-1 R^{21d}, (C₁-C₄ alkyl)carbonyl substituted with 0-1 R^{21d},

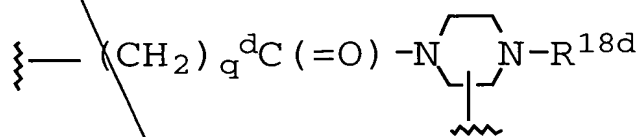
C₁-C₄ alkylsulfonyl substituted with 0-1 R^{21d}, and
 C₁-C₄ alkylaminosulfonyl substituted with 0-1 R^{21d};

W^d is selected from:

- 5 -(C(R^{12d})₂)_q^dC(=O)N(R^{13d})-, and
 -C(=O)-N(R^{13d})-(C(R^{12d})₂)_q^d-;

X^d is -C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-; or
 alternatively, W^d and X^d can be taken together to be

10



R^{12d} is selected from H, halogen, C₁-C₆ alkyl, C₂-C₆
 alkenyl, C₂-C₆ alkynyl, C₃-C₇ cycloalkyl,
 15 C₄-C₁₀ cycloalkylalkyl, (C₁-C₄ alkyl)carbonyl, aryl,
 and aryl(C₁-C₆ alkyl)-;

R^{13d} is selected from H, C₁-C₆ alkyl, C₃-C₇
 cycloalkylmethyl, and aryl(C₁-C₆ alkyl)-;

20

R^{14d} is selected from:

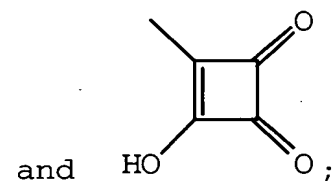
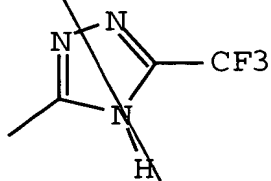
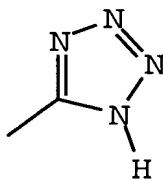
- H, C₁-C₆ alkylthio(C₁-C₆ alkyl)-, aryl(C₁-C₁₀
 alkylthioalkyl)-, aryl(C₁-C₁₀ alkoxyalkyl)-, C₁-C₁₀
 alkyl, C₁-C₁₀ alkoxyalkyl, C₁-C₆ hydroxyalkyl, C₂-C₁₀
 25 alkenyl, C₂-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-C₁₀
 cycloalkylalkyl, aryl(C₁-C₆ alkyl)-, heteroaryl(C₁-C₆
 alkyl)-, aryl, heteroaryl, CO₂R^{17d}, C(=O)R^{17d}, and
 CONR^{17d}R^{20d}, provided that any of the above alkyl,
 cycloalkyl, aryl or heteroaryl groups may be
 30 unsubstituted or substituted independently with 0-1
 R^{16d} or 0-2 R^{11d};

R^{15d} is selected from:

H, R^{16d}, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl,
 C₁-C₁₀ alkylaminoalkyl, C₁-C₁₀ dialkylaminoalkyl,
 (C₁-C₁₀ alkyl)carbonyl, aryl(C₁-C₆ alkyl)carbonyl,
 5 C₁-C₁₀ alkenyl, C₁-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-
 C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-,
 heteroaryl(C₁-C₆ alkyl)-, aryl, heteroaryl, CO₂R^{17d},
 C(=O)R^{17d}, CONR^{17d}R^{20d}, SO₂R^{17d}, and SO₂NR^{17d}R^{20d},
 provided that any of the above alkyl, cycloalkyl,
 10 aryl or heteroaryl groups may be unsubstituted or
 substituted independently with 0-2 R^{11d};

Y^d is selected from:

-COR^{19d}, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -
 15 CONHSO₂R^{17d}, -CONHSO₂NHR^{17d}, -NHCOCF₃, -NHCONHSO₂R^{17d},
 -NHSO₂R^{17d}, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H, -
 SO₂NHCOR^{17d}, -SO₂NHCO₂R^{17d},



20

R^{16d} is selected from:

-N(R^{20d})-C(=O)-O-R^{17d},
 -N(R^{20d})-C(=O)-R^{17d},
 -N(R^{20d})-C(=O)-NH-R^{17d},
 25 -N(R^{20d})SO₂-R^{17d}, and
 -N(R^{20d})SO₂-NR^{20d}R^{17d};

R^{17d} is selected from:

C₁-C₁₀ alkyl optionally substituted with a bond to
 30 L_n, C₃-C₁₁ cycloalkyl optionally substituted with a
 bond to L_n, aryl(C₁-C₆ alkyl)- optionally substituted

with a bond to L_n , (C_1 - C_6 alkyl)aryl optionally substituted with a bond to L_n , heteroaryl(C_1 - C_6 alkyl)- optionally substituted with a bond to L_n , (C_1 - C_6 alkyl)heteroaryl optionally substituted with a bond to L_n , biaryl(C_1 - C_6 alkyl)- optionally substituted with a bond to L_n , heteroaryl optionally substituted with a bond to L_n , aryl optionally substituted with a bond to L_n , biaryl optionally substituted with a bond to L_n , and a bond to L_n , wherein said aryl, biaryl or heteroaryl groups are also optionally substituted with 0-3 substituents selected from the group consisting of: C_1 - C_4 alkyl, C_1 - C_4 alkoxy, aryl, heteroaryl, halo, cyano, amino, CF_3 , and NO_2 ;

R^{18d} is selected from:

-H,
 $-C(=O)-O-R^{17d}$,
 $-C(=O)-R^{17d}$,
 $-C(=O)-NH-R^{17d}$,
 $-SO_2-R^{17d}$, and
 $-SO_2-NR^{20d}R^{17d}$;

R^{19d} is selected from: hydroxy, C_1 - C_{10} alkyloxy, C_3 - C_{11} cycloalkyloxy, aryloxy, aryl(C_1 - C_6 alkoxy)-, C_3 - C_{10} alkylcarbonyloxyalkyloxy, C_3 - C_{10} alkoxy carbonyloxyalkyloxy, C_2 - C_{10} alkoxy carbonylalkyloxy, C_5 - C_{10} cycloalkylcarbonyloxyalkyloxy, C_5 - C_{10} cycloalkoxy carbonyloxyalkyloxy, C_5 - C_{10} cycloalkoxy carbonylalkyloxy, C_7 - C_{11} aryloxy carbonylalkyloxy, C_8 - C_{12} aryloxy carbonyloxyalkyloxy, C_8 - C_{12} arylcarbonyloxyalkyloxy,

C₅-C₁₀ alkoxyalkylcarbonyloxyalkyloxy,
 C₅-C₁₀ (5-alkyl-1,3-dioxo-cyclopenten-2-one-
 yl)methyloxy, C₁₀-C₁₄ (5-aryl-1,3-dioxo-cyclopenten-
 2-one-yl)methyloxy, and

5 (R^{11d}) (R^{12d})N-(C₁-C₁₀ alkoxy)-;

R^{20d} is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,
 C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and
 heteroaryl(C₁-C₆ alkyl)-;

10

R^{21d} is selected from: COOH and NR^{6d}₂;

m^d is 0-4;

n^d is 0-4;

t^d is 0-4;

15 p^d is 0-2;

q^d is 0-2; and

r^d is 0-2;

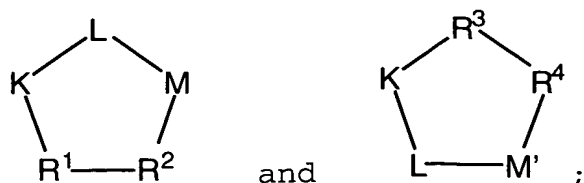
with the following provisos:

20 (1) t^d, n^d, m^d and q^d are chosen such that the number of
 atoms connecting R^{1d} and Y^d is in the range of 10-14;
 and

(2) n^d and m^d are chosen such that the value of n^d plus
 m^d is greater than one unless U^d is

25 $-(\text{CH}_2)_t \text{Q}^{\text{d}} (\text{CH}_2)_m^-$;

or Q is a peptide selected from the group:



R¹ is L-valine, D-valine or L-lysine optionally substituted on the ε amino group with a bond to L_n;

5

R² is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L_n;

10

R³ is D-valine;

R⁴ is D-tyrosine substituted on the hydroxy group with a bond to L_n;

15

provided that one of R¹ and R² in each Q is substituted with a bond to L_n, and further provided that when R² is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

20

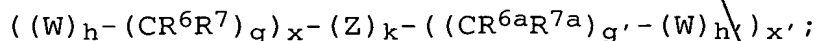
provided that at least one Q is a compound of Formula (Ia) or (Ib);

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

25

d' is 1-100;

L_n is a linking group having the formula:



30

W is independently selected at each occurrence from the group: O, S, NH, NHC(=O), C(=O)NH, NR⁸C(=O), C(=O)N

R^8 , $C(=O)$, $C(=O)O$, $OC(=O)$, $NHC(=S)NH$, $NHC(=O)NH$, SO_2 ,
 SO_2NH , $(OCH_2CH_2)_s$, $(CH_2CH_2O)_s$, $(OCH_2CH_2CH_2)_s$,
 $(CH_2CH_2CH_2O)_t$, and $(aa)_t$;

5 aa is independently at each occurrence an amino acid;

Z is selected from the group: aryl substituted with 0-3
 R^{10} , C_{3-10} cycloalkyl substituted with 0-3 R^{10} , and a
 5-10 membered heterocyclic ring system containing
 10 1-4 heteroatoms independently selected from N, S,
 and O and substituted with 0-3 R^{10} ;

R^6 , R^{6a} , R^7 , R^{7a} , and R^8 are independently selected at
 each occurrence from the group: H, =O, COOH, SO_3H ,
 15 PO_3H , C_1-C_5 alkyl substituted with 0-3 R^{10} , aryl
 substituted with 0-3 R^{10} , benzyl substituted with 0-3
 R^{10} , and C_1-C_5 alkoxy substituted with 0-3 R^{10} ,
 $NHC(=O)R^{11}$, $C(=O)NHR^{11}$, $NHC(=O)NHR^{11}$, NHR^{11} , R^{11} , and
 a bond to Ch ;

20 R^{10} is independently selected at each occurrence from the
 group: a bond to Ch , $COOR^{11}$, $C(=O)NHR^{11}$, $NHC(=O)R^{11}$,
 OH , NHR^{11} , SO_3H , PO_3H , $-OPO_3H_2$, $-OSO_3H$, aryl
 substituted with 0-3 R^{11} , C_{1-5} alkyl substituted with
 25 0-1 R^{12} , C_{1-5} alkoxy substituted with 0-1 R^{12} , and a
 5-10 membered heterocyclic ring system containing
 1-4 heteroatoms independently selected from N, S,
 and O and substituted with 0-3 R^{11} ;

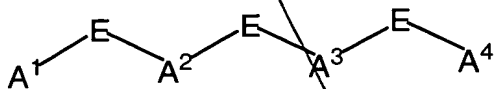
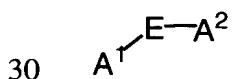
30 R^{11} is independently selected at each occurrence from the
 group: H, alkyl substituted with 0-1 R^{12} , aryl
 substituted with 0-1 R^{12} , a 5-10 membered
 heterocyclic ring system containing 1-4 heteroatoms
 independently selected from N, S, and O and

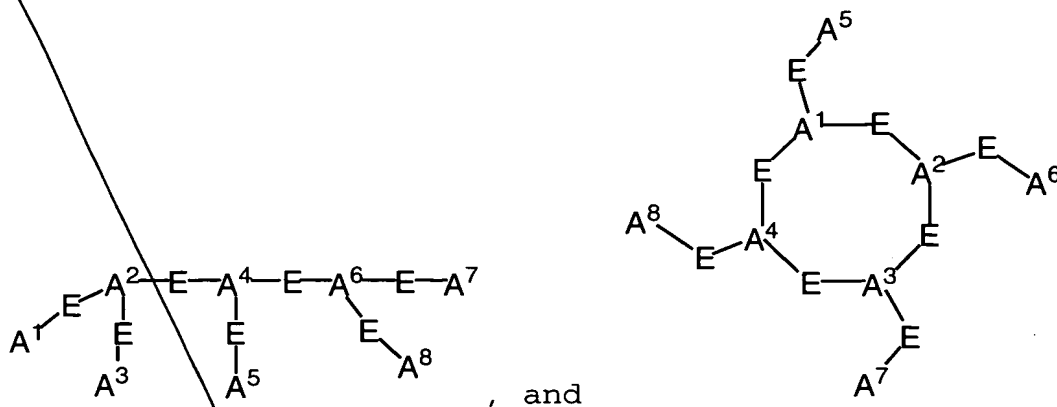
substituted with 0-1 R^{12} , C_{3-10} cycloalkyl
 substituted with 0-1 R^{12} , polyalkylene glycol
 substituted with 0-1 R^{12} , carbohydrate substituted
 with 0-1 R^{12} , cyclodextrin substituted with 0-1 R^{12} ,
 5 amino acid substituted with 0-1 R^{12} , polycarboxyalkyl
 substituted with 0-1 R^{12} , polyazaalkyl substituted
 with 0-1 R^{12} , and peptide substituted with 0-1 R^{12} ,
 wherein the peptide is comprised of 2-10 amino
 acids, 3,6-O-disulfo-B-D-galactopyranosyl,
 10 bis(phosphonomethyl)glycine, and a bond to C_h ;

R^{12} is a bond to C_h ;

k is selected from 0, 1, and 2;
 15 h is selected from 0, 1, and 2;
 h' is selected from 0, 1, and 2;
 g is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 g' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 s is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 20 s' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 s'' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 t is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 t' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;
 x is selected from 0, 1, 2, 3, 4, and 5;
 25 x' is selected from 0, 1, 2, 3, 4, and 5;

C_h is a metal bonding unit having a formula selected from
 the group:





A¹, A², A³, A⁴, A⁵, A⁶, A⁷, and A⁸ are independently selected at each occurrence from the group: NR¹³,
 5 NR¹³R¹⁴, S, SH, S(Pg), O, OH, PR¹³, PR¹³R¹⁴, P(O)R¹⁵R¹⁶, and a bond to L_n;

E is a bond, CH, or a spacer group independently selected at each occurrence from the group: C₁-C₁₀ alkyl substituted with 0-3 R¹⁷, aryl substituted with 0-3 R¹⁷,
 10 C₃₋₁₀ cycloalkyl substituted with 0-3 R¹⁷, heterocyclo-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C₆₋₁₀
 15 aryl-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, C₁₋₁₀ alkyl-C₆₋₁₀ aryl- substituted with 0-3 R¹⁷, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R¹⁷;
 20

R¹³ and R¹⁴ are each independently selected from the group: a bond to L_n, hydrogen, C₁-C₁₀ alkyl substituted with 0-3 R¹⁷, aryl substituted with 0-3 R¹⁷,
 25 R¹⁷, C₁₋₁₀ cycloalkyl substituted with 0-3 R¹⁷, heterocyclo-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷,

wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C₆₋₁₀ aryl-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, C₁₋₁₀ alkyl-C₆₋₁₀ aryl- substituted with 0-3 R¹⁷, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R¹⁷, and an electron, provided that when one of R¹³ or R¹⁴ is an electron, then the other is also an electron;

alternatively, R¹³ and R¹⁴ combine to form =C(R²⁰)(R²¹);

R¹⁵ and R¹⁶ are each independently selected from the group: a bond to L_n, -OH, C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, aryl substituted with 0-3 R¹⁷, C₃₋₁₀ cycloalkyl substituted with 0-3 R¹⁷, heterocyclo-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C₆₋₁₀ aryl-C₁₋₁₀ alkyl substituted with 0-3 R¹⁷, C₁₋₁₀ alkyl-C₆₋₁₀ aryl- substituted with 0-3 R¹⁷, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R¹⁷;

R¹⁷ is independently selected at each occurrence from the group: a bond to L_n, =O, F, Cl, Br, I, -CF₃, -CN, -CO₂R¹⁸, -C(=O)R¹⁸, -C(=O)N(R¹⁸)₂, -CHO, -CH₂OR¹⁸, -OC(=O)R¹⁸, -OC(=O)OR^{18a}, -OR¹⁸, -OC(=O)N(R¹⁸)₂, -NR¹⁹C(=O)R¹⁸, -NR¹⁹C(=O)OR^{18a}, -NR¹⁹C(=O)N(R¹⁸)₂,

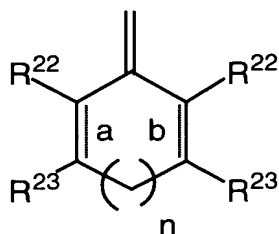
$-\text{NR}^{19}\text{SO}_2\text{N}(\text{R}^{18})_2$, $-\text{NR}^{19}\text{SO}_2\text{R}^{18a}$, $-\text{SO}_3\text{H}$, $-\text{SO}_2\text{R}^{18a}$,
 $-\text{SR}^{18}$, $-\text{S}(=\text{O})\text{R}^{18a}$, $-\text{SO}_2\text{N}(\text{R}^{18})_2$, $-\text{N}(\text{R}^{18})_2$,
 $-\text{NHC}(=\text{S})\text{NHR}^{18}$, $=\text{NOR}^{18}$, NO_2 , $-\text{C}(=\text{O})\text{NHR}^{18}$,
 $-\text{C}(=\text{O})\text{NHN}(\text{R}^{18})_2$, $-\text{OCH}_2\text{CO}_2\text{H}$, 2-(1-morpholino)ethoxy,
 5 C₁-C₅ alkyl, C₂-C₄ alkenyl, C₃-C₆ cycloalkyl, C₃-C₆
 cycloalkylmethyl, C₂-C₆ alkoxyalkyl, aryl
 substituted with 0-2 R¹⁸, and a 5-10 membered
 heterocyclic ring system containing 1-4 heteroatoms
 independently selected from N, S, and O;

10 R¹⁸, R^{18a}, and R¹⁹ are independently selected at each
 occurrence from the group: a bond to L_n, H, C₁-C₆
 alkyl, phenyl, benzyl, C₁-C₆ alkoxy, halide, nitro,
 cyano, and trifluoromethyl;

15 Pg is a thiol protecting group;

20 R²⁰ and R²¹ are independently selected from the group: H,
 C₁-C₁₀ alkyl, $-\text{CN}$, $-\text{CO}_2\text{R}^{25}$, $-\text{C}(=\text{O})\text{R}^{25}$, $-\text{C}(=\text{O})\text{N}(\text{R}^{25})_2$,
 C₂-C₁₀ 1-alkene substituted with 0-3 R²³, C₂-C₁₀
 1-alkyne substituted with 0-3 R²³, aryl substituted
 with 0-3 R²³, unsaturated 5-10 membered heterocyclic
 ring system containing 1-4 heteroatoms independently
 selected from N, S, and O and substituted with 0-3
 25 R²³, and unsaturated C₃-C₁₀ carbocycle substituted
 with 0-3 R²³;

alternatively, R²⁰ and R²¹, taken together with the
 divalent carbon radical to which they are attached
 30 form:



R^{22} and R^{23} are independently selected from the group: H,
 R^{24} , C₁-C₁₀ alkyl substituted with 0-3 R^{24} , C₂-C₁₀
 5 alkenyl substituted with 0-3 R^{24} , C₂-C₁₀ alkynyl
 substituted with 0-3 R^{24} , aryl substituted with 0-3
 R^{24} , a 5-10 membered heterocyclic ring system
 containing 1-4 heteroatoms independently selected
 from N, S, and O and substituted with 0-3 R^{24} , and
 10 C₃-10 carbocycle substituted with 0-3 R^{24} ;

alternatively, R^{22} , R^{23} taken together form a fused
 aromatic or a 5-10 membered heterocyclic ring system
 containing 1-4 heteroatoms independently selected
 15 from N, S, and O;

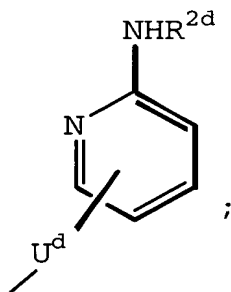
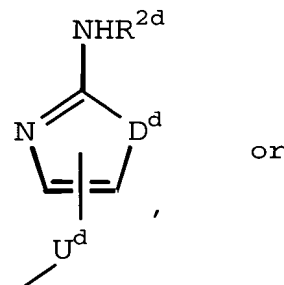
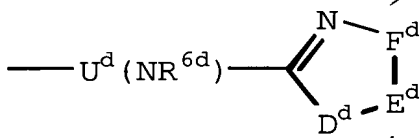
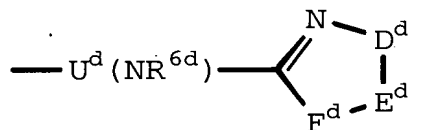
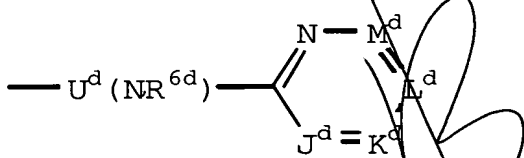
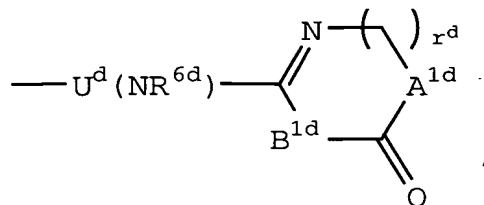
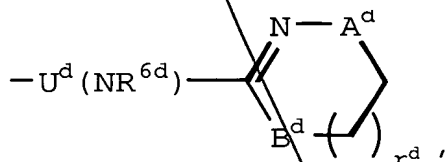
a and b indicate the positions of optional double bonds
 and n is 0 or 1;

20 R^{24} is independently selected at each occurrence from the
 group: =O, F, Cl, Br, I, -CF₃, -CN, -CO₂R²⁵,
 -C(=O)R²⁵, -C(=O)N(R²⁵)₂, -N(R²⁵)₃⁺, -CH₂OR²⁵,
 -OC(=O)R²⁵, -OC(=O)OR^{25a}, -OR²⁵, -OC(=O)N(R²⁵)₂,
 -NR²⁶C(=O)R²⁵, -NR²⁶C(=O)OR^{25a}, -NR²⁶C(=O)N(R²⁵)₂,
 25 -NR²⁶SO₂N(R²⁵)₂, -NR²⁶SO₂R^{25a}, -SO₃H, -SO₂R^{25a}, -SR²⁵,
 -S(=O)R^{25a}, -SO₂N(R²⁵)₂, -N(R²⁵)₂, =NOR²⁵,
 -C(=O)NHOR²⁵, -OCH₂CO₂H, and 2-(1-morpholino)ethoxy;
 and,

~~R²⁵, R^{25a}, and R²⁶ are each independently selected at each occurrence from the group: hydrogen and C₁-C₆ alkyl.~~

5 3. A compound according to Claim 2, wherein:

R^{1de} is selected from:



10

A^d and B^d are independently -CH₂-, -O-, -N(R^{2d})-, or -C(=O)-;

A^{1d} and B^{1d} are independently -CH₂- or -N(R^{3d})-;

D^d is -N(R^{2d})-, -O-, -S-, -C(=O)- or -SO₂-;

5 E^d-F^d is -C(R^{4d})=C(R^{5d})-, -N=C(R^{4d})-, -C(R^{4d})=N-, or -
C(R^{4d})₂C(R^{5d})₂-;

J^d, K^d, L^d and M^d are independently selected from:

10 C(R^{4d})-, -C(R^{5d})- and -N-, provided that at least one
of J^d, K^d, L^d and M^d is not -N-;

R^{2d} is selected from: H, C₁-C₆ alkyl, (C₁-C₆
alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, C₁-C₆
alkylaminocarbonyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl,
15 C₄-C₁₁ cycloalkylalkyl, aryl, heteroaryl(C₁-C₆
alkyl)carbonyl, heteroarylcarbonyl, aryl(C₁-C₆
alkyl)-, (C₁-C₆ alkyl)carbonyl, arylcarbonyl,
alkylsulfonyl, arylsulfonyl, aryl(C₁-C₆
alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C₁-C₆
20 alkyl)sulfonyl, aryloxy carbonyl, and aryl(C₁-C₆
alkoxy)carbonyl, wherein said aryl groups are
substituted with 0-2 substituents selected from the
group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy, halo,
CF₃, and nitro;

25 R^{3d} is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,
C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and
heteroaryl(C₁-C₆ alkyl)-;

30 R^{4d} and R^{5d} are independently selected from: H, C₁-C₄
alkoxy, NR^{2d}R^{3d}, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl,
C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁

cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, C₂-C₇ alkylcarbonyl, and arylcarbonyl;

alternatively, when substituents on adjacent atoms, R^{4d}

5 and R^{5d} can be taken together with the carbon atoms to which they are attached to form a 5-7 membered carbocyclic or 5-7 membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with
10 0-2 groups selected from: C₁-C₄ alkyl, C₁-C₄ alkoxy, halo, cyano, amino, CF₃, or NO₂;

U^d is selected from:

-(CH₂)_n^d-,

-(CH₂)_n^d (CR^{7d}=CR^{8d}) (CH₂)_m^d-,

15 -(CH₂)_t^d Q^d (CH₂)_m^d-,

-(CH₂)_n^d O(CH₂)_m^d-,

-(CH₂)_n^d N(R^{6d}) (CH₂)_m^d-,

-(CH₂)_n^d C(=O) (CH₂)_m^d-, and

-(CH₂)_n^d S(O)_p^d (CH₂)_m^d-;

20

wherein one or more of the methylene groups in U^d is optionally substituted with R^{7d};

25 Q^d is selected from 1,2-phenylene, 1,3-phenylene, 2,3-pyridinylene, 3,4-pyridinylene, and 2,4-pyridinylene;

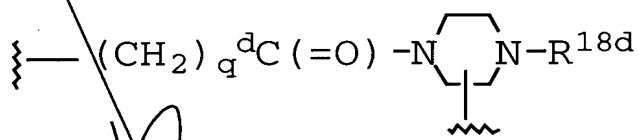
R^{6d} is selected from: H, C₁-C₄ alkyl, and benzyl;

R^{7d} and R^{8d} are independently selected from: H, C_1-C_6 alkyl, C_3-C_7 cycloalkyl, C_4-C_{11} cycloalkylalkyl, aryl, aryl(C_1-C_6 alkyl)-, and heteroaryl(C_0-C_6 alkyl)-;

W^d is $-C(=O)-N(R^{13d})-(C(R^{12d})_2)_q^d-$;

X^d is $-C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-$;

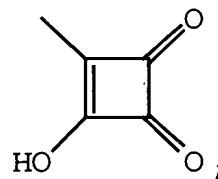
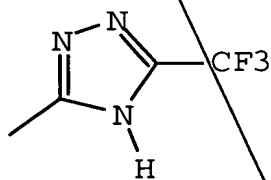
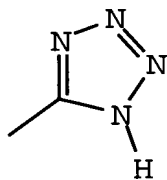
alternatively, W^d and X^d can be taken together to be



R^{12d} is H or C_1-C_6 alkyl;

Y^d is selected from:

$-\text{COR}^{19d}$, $-\text{SO}_3\text{H}$,



d is selected from 1, 2, 3, 4, and 5;

d' is 1-50;

W is independently selected at each occurrence from the group: O, NH, $\text{NHC}(=\text{O})$, $\text{C}(=\text{O})\text{NH}$, $\text{NR}^8\text{C}(=\text{O})$, $\text{C}(=\text{O})\text{NR}^8$, $\text{C}(=\text{O})$, $\text{C}(=\text{O})\text{O}$, $\text{OC}(=\text{O})$, $\text{NHC}(=\text{S})\text{NH}$, $\text{NHC}(=\text{O})\text{NH}$, SO_2 ,

$(\text{OCH}_2\text{CH}_2)_s$, $(\text{CH}_2\text{CH}_2\text{O})_{s'}$, $(\text{OCH}_2\text{CH}_2\text{CH}_2)_{s''}$, $(\text{CH}_2\text{CH}_2\text{CH}_2\text{O})_t$,
and $(\text{aa})_t$;

aa is independently at each occurrence an amino acid;

5

Z is selected from the group: aryl substituted with 0-1 R^{10} , C_{3-10} cycloalkyl substituted with 0-1 R^{10} , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-1 R^{10} ;

10

R^6 , R^{6a} , R^7 , R^{7a} , and R^8 are independently selected at each occurrence from the group: H, =O, COOH , SO_3H , $\text{C}_1\text{-C}_5$ alkyl substituted with 0-1 R^{10} , aryl substituted with 0-1 R^{10} , benzyl substituted with 0-1 R^{10} , and $\text{C}_1\text{-C}_5$ alkoxy substituted with 0-1 R^{10} , $\text{NHC}(=\text{O})\text{R}^{11}$, $\text{C}(=\text{O})\text{NHR}^{11}$, $\text{NHC}(=\text{O})\text{NHR}^{11}$, NHR^{11} , R^{11} , and a bond to C_h ;

15

20 k is 0 or 1;

s is selected from 0, 1, 2, 3, 4, and 5;

s' is selected from 0, 1, 2, 3, 4, and 5;

s'' is selected from 0, 1, 2, 3, 4, and 5;

t is selected from 0, 1, 2, 3, 4, and 5;

25

A^1 , A^2 , A^3 , A^4 , A^5 , A^6 , A^7 , and A^8 are independently selected at each occurrence from the group: NR^{13} , $\text{NR}^{13}\text{R}^{14}$, S, SH, S(Pg), OH, and a bond to L_n ;

30 E is a bond, CH, or a spacer group independently selected at each occurrence from the group: $\text{C}_1\text{-C}_{10}$ alkyl substituted with 0-3 R^{17} , aryl substituted with 0-3 R^{17} , C_{3-10} cycloalkyl substituted with 0-3 R^{17} , and a 5-10 membered heterocyclic ring system containing

1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R¹⁷;

5 R¹³ and R¹⁴ are each independently selected from the group: a bond to L_n, hydrogen, C₁-C₁₀ alkyl substituted with 0-3 R¹⁷, aryl substituted with 0-3 R¹⁷, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R¹⁷, and
10 an electron, provided that when one of R¹³ or R¹⁴ is an electron, then the other is also an electron;

alternatively, R¹³ and R¹⁴ combine to form =C(R²⁰)(R²¹);

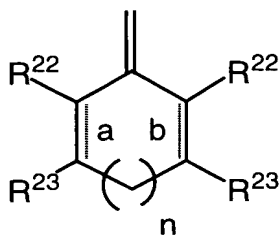
15 R¹⁷ is independently selected at each occurrence from the group: a bond to L_n, =O, F, Cl, Br, I, -CF₃, -CN, -CO₂R¹⁸, -C(=O)R¹⁸, -C(=O)N(R¹⁸)₂, -CH₂OR¹⁸, -OC(=O)R¹⁸, -OC(=O)OR^{18a}, -OR¹⁸, -OC(=O)N(R¹⁸)₂, -NR¹⁹C(=O)R¹⁸, -NR¹⁹C(=O)OR^{18a}, -NR¹⁹C(=O)N(R¹⁸)₂,
20 -NR¹⁹SO₂N(R¹⁸)₂, -NR¹⁹SO₂R^{18a}, -SO₃H, -SO₂R^{18a}, -S(=O)R^{18a}, -SO₂N(R¹⁸)₂, -N(R¹⁸)₂, -NHC(=S)NHR¹⁸, =NOR¹⁸, -C(=O)NHN(R¹⁸)R^{18a}, -OCH₂CO₂H, and 2-(1-morpholino)ethoxy;

25 R¹⁸, R^{18a}, and R¹⁹ are independently selected at each occurrence from the group: a bond to L_n, H, and C₁-C₆ alkyl;

30 R²⁰ and R²¹ are independently selected from the group: H, C₁-C₅ alkyl, -CO₂R²⁵, C₂-C₅ 1-alkene substituted with 0-3 R²³, C₂-C₅ 1-alkyne substituted with 0-3 R²³, aryl substituted with 0-3 R²³, and unsaturated 5-10 membered heterocyclic ring system containing 1-4

heteroatoms independently selected from N, S, and O
and substituted with 0-3 R^{23} ;

alternatively, R^{20} and R^{21} , taken together with the
5 divalent carbon radical to which they are attached
form:



10 R^{22} and R^{23} are independently selected from the group: H,
and R^{24} ;

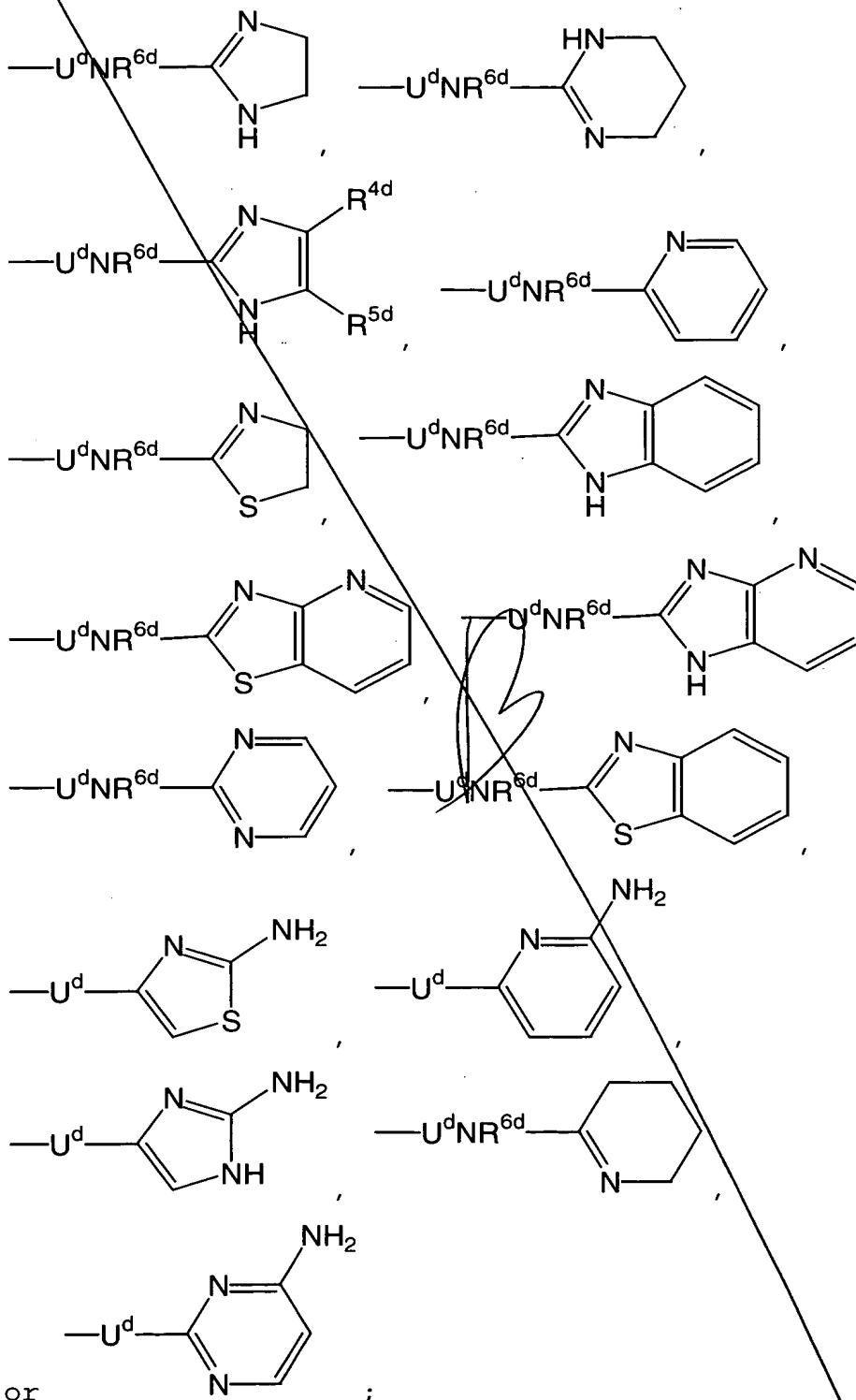
alternatively, R^{22} , R^{23} taken together form a fused
aromatic or a 5-10 membered heterocyclic ring system
15 containing 1-4 heteroatoms independently selected
from N, S, and O;

R^{24} is independently selected at each occurrence from the
group: $-CO_2R^{25}$, $-C(=O)N(R^{25})_2$, $-CH_2OR^{25}$, $-OC(=O)R^{25}$,
20 $-OR^{25}$, $-SO_3H$, $-N(R^{25})_2$, and $-OCH_2CO_2H$; and,

R^{25} is independently selected at each occurrence from the
group: H and C_1-C_3 alkyl.

25 4. A compound according to Claim 3, wherein:

R^{1de} is selected from:



wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group: NH₂,

halogen, NO₂, CN, CF₃, C₁-C₄ alkoxy, C₁-C₆ alkyl, and C₃-C₇ cycloalkyl;

U^d is -(CH₂)_n-, -(CH₂)_t Q^{d d} (CH₂)_m- or -C(=O)(CH₂)_n-1-,

5 wherein one of the methylene groups is optionally substituted with R^{7d};

R^{7d} is selected from: C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl),
10 heteroaryl, and heteroaryl(C₁-C₆ alkyl);

R^{10d} is selected from: H, R^{1de}, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, halogen, CO₂R^{17d}, CONR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d},
15 C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

20 R^{10de} is selected from: H, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, halogen, CO₂R^{17d}, CONR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d},
25 C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

W^d is -C(=O)-N(R^{13d})-;

30 X^d is -CH(R^{14d})-CH(R^{15d})-;

R^{13d} is H or CH₃;

R^{14d} is selected from:

H, C₁-C₁₀ alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

R^{15d} is H or R^{16d};

Y^d is -COR^{19d};

R^{19d} is selected from:

hydroxy, C₁-C₁₀ alkoxy,
methylcarbonyloxymethoxy-,
ethylcarbonyloxymethoxy-,
t-butylcarbonyloxymethoxy-,
cyclohexylcarbonyloxymethoxy-,
1-(methylcarbonyloxy)ethoxy-,
1-(ethylcarbonyloxy)ethoxy-,
1-(t-butylcarbonyloxy)ethoxy-,
1-(cyclohexylcarbonyloxy)ethoxy-,
i-propyloxy carbonyloxymethoxy-,
t-butyloxy carbonyloxymethoxy-,
1-(i-propyloxy carbonyloxy)ethoxy-,
1-(cyclohexyloxy carbonyloxy)ethoxy-,
1-(t-butyloxy carbonyloxy)ethoxy-,
dimethylaminoethoxy-,
diethylaminoethoxy-,
(5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,
(5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,
(1,3-dioxo-5-phenyl-cyclopenten-2-on-4-yl)methoxy-, and
1-(2-(2-methoxypropyl) carbonyloxy)ethoxy-;

R^{20d} is H or CH₃;

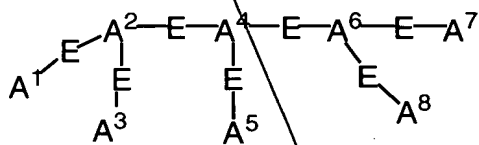
m^d is 0 or 1;

n^d is 1-4;

t^d is 0 or 1;

5

C_h is



10

A^1 is selected from the group: OH, and a bond to L_n ;

A^2 , A^4 , and A^6 are each N;

15

A^3 , A^5 , and A^8 are each OH;

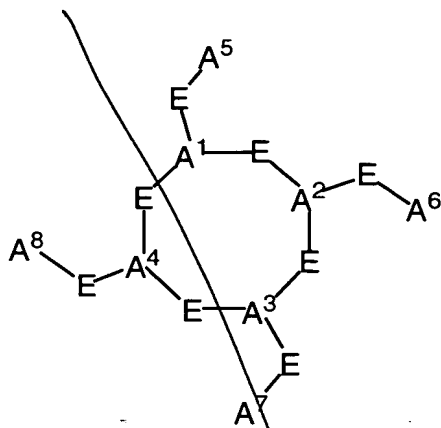
A^7 is a bond to L_n or NH-bond to L_n ;

E is a C_2 alkyl substituted with 0-1 R^{17} ;

20

R^{17} is =O;

alternatively, C_h is



A^1 is selected from the group: OH and a bond to L_n ;

5

A^2 , A^3 and A^4 are each N;

A^5 , A^6 and A^8 are each OH;

10

A^7 is a bond to L_n ;

E is a C_2 alkyl substituted with 0-1 R^{17} ;

R^{17} is =O;

15

alternatively, C_h is A^1-E-A^2 ;

A^1 is NH_2 or $N=C(R^{20})(R^{21})$;

E is a bond;

20

A^2 is NHR^{13} ;

R^{13} is a heterocycle substituted with R^{17} , the heterocycle being selected from pyridine and pyrimidine;

25

R¹⁷ is selected from a bond to L_n, C(=O)NHR¹⁸ and
C(=O)R¹⁸;

R¹⁸ is a bond to L_n;

5

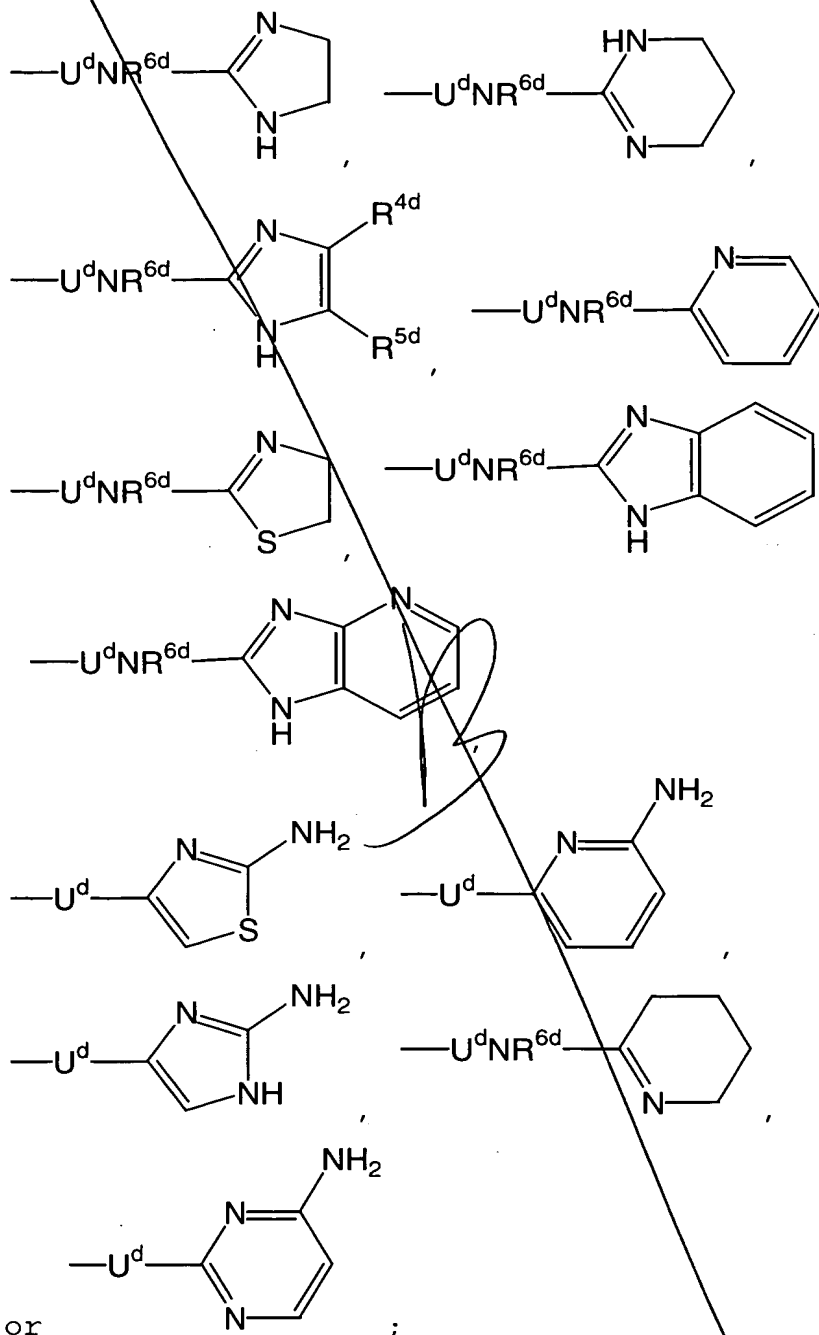
R²⁴ is selected from the group: -CO₂R²⁵, -OR²⁵, -SO₃H, and
-N(R²⁵)₂; and

10

R²⁵ is independently selected at each occurrence from the
group: hydrogen and methyl.

5. A compound according to Claim 4, wherein:

R^{1de} is selected from:



wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group: NH₂, halogen, NO₂, CN, CF₃, C₁-C₄ alkoxy, C₁-C₆ alkyl, and C₃-C₇ cycloalkyl.

6. A compound according to Claim 2, wherein the compound is selected from the group:

- 5 2-(((4-(4-(((3-(2-(2-(3-((6-((1-aza-2-(2-sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)propoxy)-ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)-3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;
- 10
- 2-(2-aza-2-((5-(N-(1,3-bis(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)propyl)carbamoyl)(2-pyridyl))amino)vinyl)benzenesulfonic acid;
- 15
- 20 2-((6-((1-aza-2-(sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)-4-(N-(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-ethyl)amino)sulfonyl)phenyl)phenyl)sulfonyl)-amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)butanoic acid;
- 25
- 3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-2-(((4-(4-(((3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-cyclododecyl)-acetylamino)propoxy)ethoxy)ethoxy)propyl)amino)sulfonyl)phenyl)phenyl)sulfonyl)amino)propanoic acid;
- 30
- 35 2-(6-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)hexanoylamino)-3-((1-(3-

(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-propanoic acid;

2-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;

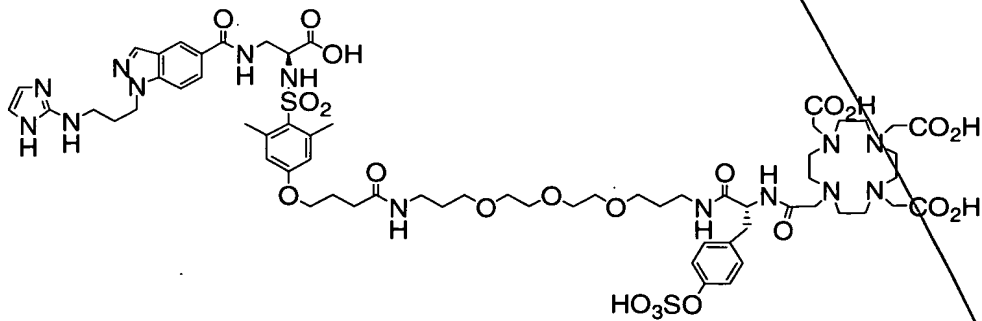
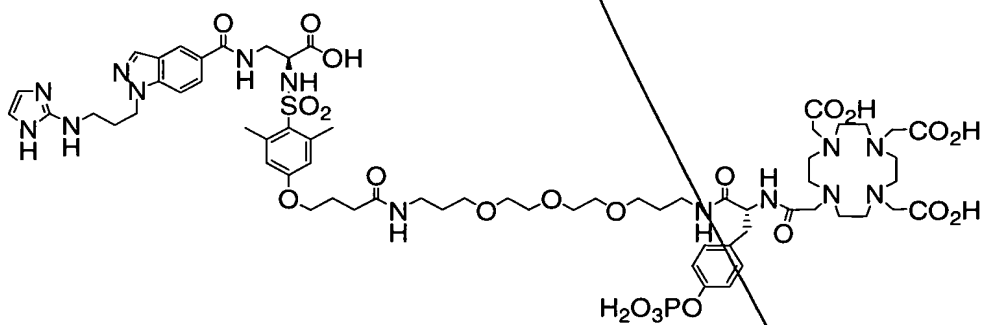
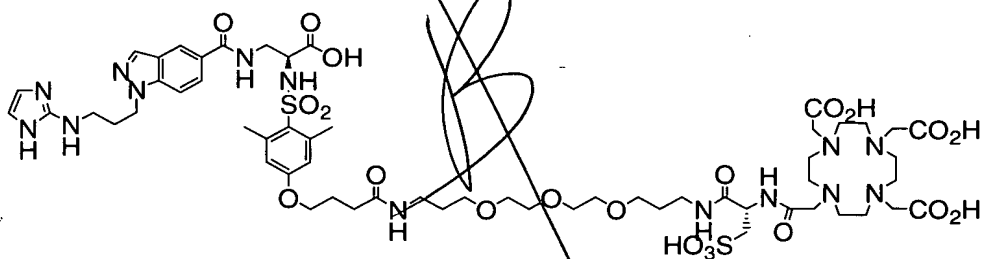
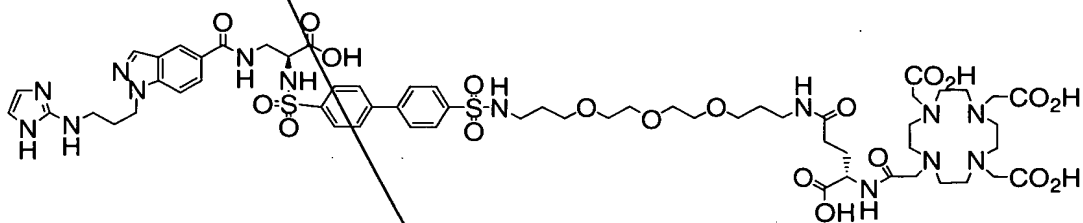
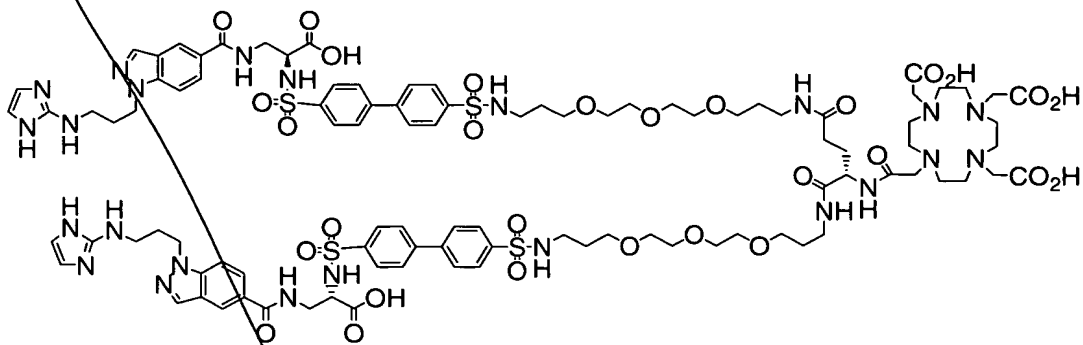
[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono)methyl]-benzenesulfonic acid]-Glu(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid);

[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono)methyl]-benzenesulfonic acid]-Glu-bis-[Glu(2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid)];

2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-cyclododecyl)acetyl-{2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid};

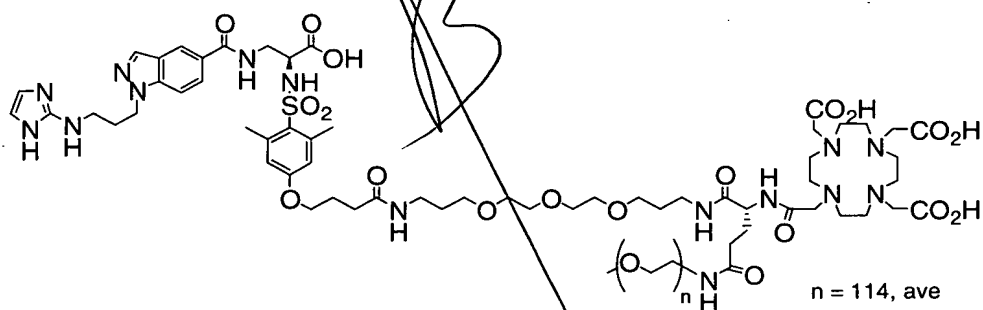
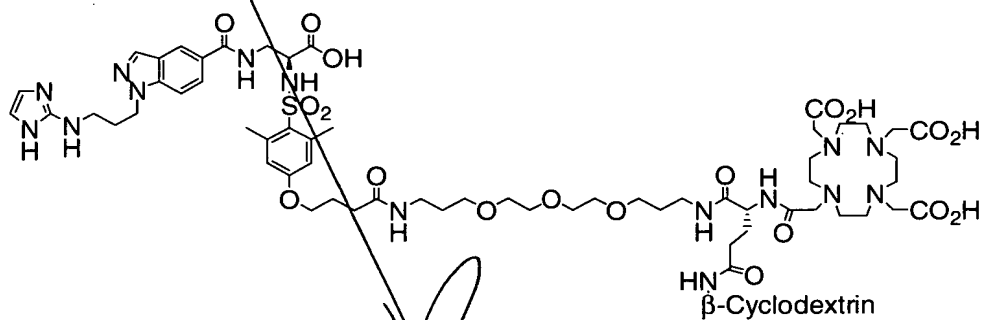
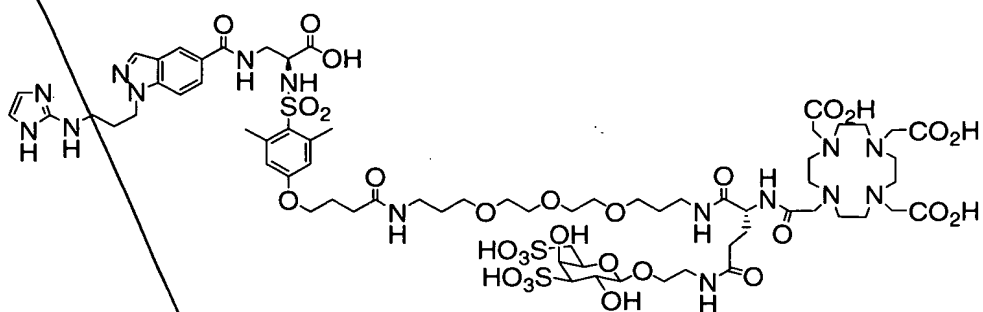
2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-cyclododecyl)acetyl-Glu{2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid}{2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid};

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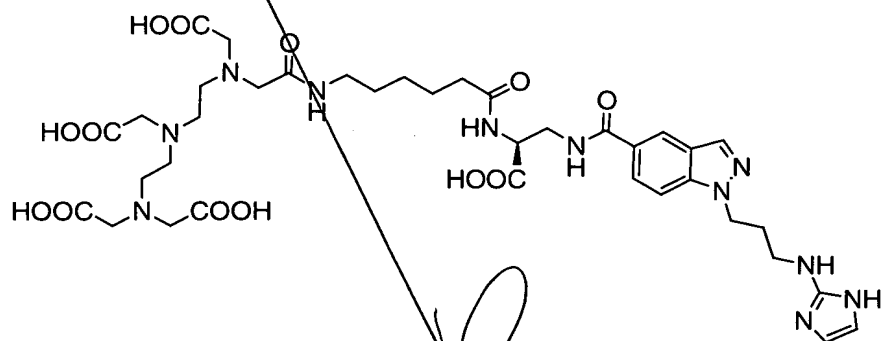
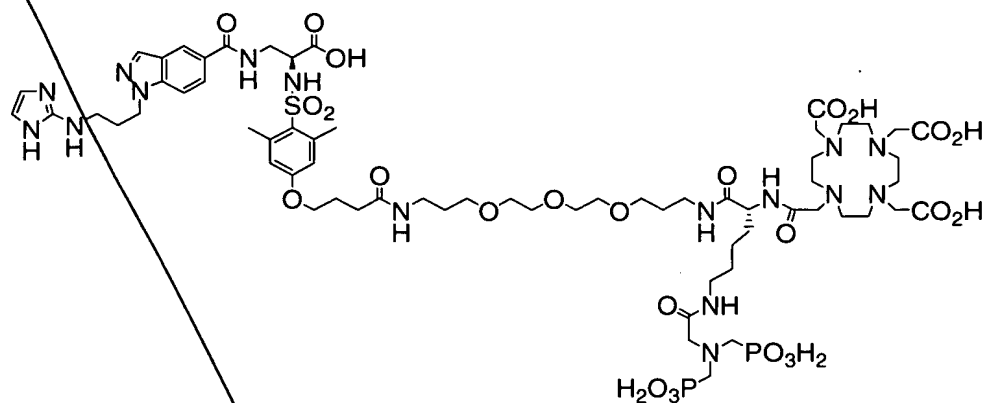


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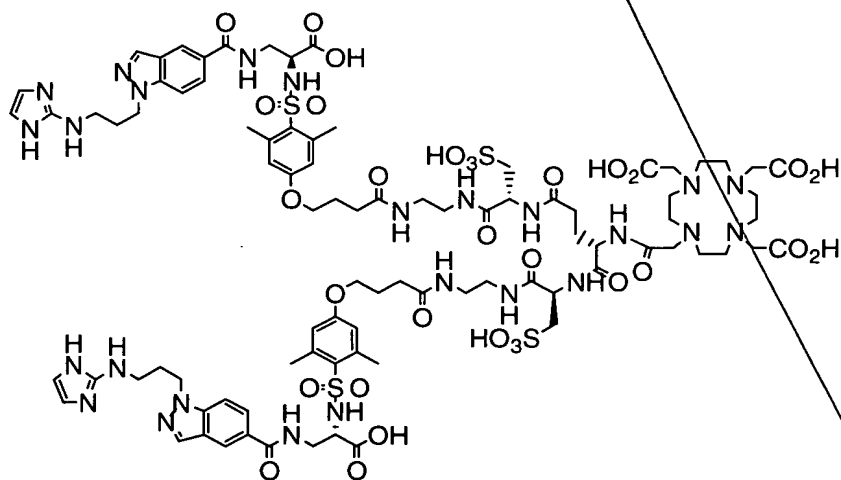
10



2-(((4-(3-(N-(3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-
 tris(carboxymethyl)cyclododecylacetyl amino)-6-
 aminohexanoyl amino)propoxy)ethoxy)ethoxy)propyl)-
 carbamoyl)propoxy)-2,6-dimethylphenyl)-
 sulfonyl)amino)-3-((1-(3-(imidazol-2-
 yl amino)propyl)(1H-indazol-5-yl))carbonyl amino)-
 propionic acid salt;



- 5 2-([4-(3-{N-[2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-
4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino}-
propyl)ethyl]carbamoyl}propoxy)-2,6-dimethylphenyl]-
sulfonyl)amino) (2S)-3-({1-[3-(imidazol-2-
ylamino)propyl] (1H-indazol-5-
yl)}carbonylamino)propanoic Acid;
- 10



2-[(4-[4-([2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-
4,7,10-tris(carboxymethyl)cyclododecyl]-
acetyl amino}propyl)ethyl amino)sulfonyl)phenyl]phenyl
sulfonyl)amino](2S)-3-([1-[3-(imidazol-2-
ylamino)propyl](1H-indazol-5-
yl)]carbonylamino)propanoic Acid;

(4S)-4-(N-{1-[N-(2-{4-[4-([1-1-carboxy-2-([1-[3-(2-
pyridylamino)propyl](1H-indazol-5-
yl)]carbonylamino)ethyl amino)sulfonyl)-3,5-
dimethylphenoxy]butanoylamino}ethyl) carbamoyl]-3-
carboxypropyl} carbamoyl)-4-{2-[1,4,7,10-tetraaza-
4,7,10-
tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic
acid;

(4S)-4-(N-{1-[N-(2-{4-[4-([1-1-carboxy-2-([1-[3-
(imidazol-2-ylamino)propyl](1H-indazol-5-
yl)]carbonylamino)ethyl amino)sulfonyl)-3,5-
dimethylphenoxy]butanoylamino}ethyl) carbamoyl]-3-
carboxypropyl} carbamoyl)-4-{2-[1,4,7,10-tetraaza-
4,7,10-
tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic
acid;

(4S)-4-{N-[(1S)-1-(N-{1,3-bis[N-(2-{4-[4-([1-1-
carboxy-2-([1-[3-(imidazol-2-ylamino)propyl](1H-
indazol-5-yl)]carbonylamino)ethyl amino)sulfonyl)-
3,5-
dimethylphenoxy]butanoylamino}ethyl) carbamoyl]propyl
} carbamoyl)-3-carboxypropyl] carbamoyl)-4-(6-{2-
[1,4,7,10-tetraaza-4,7,10-
tris(carboxymethyl)cyclododecyl]acetyl amino}
hexanoylamino)butanoic acid;

(4S)-4-(N-{1-[N-(2-{4-[4-([1-1-carboxy-2-([1-[3-
(3,4,5,6-tetrahydropyrimidin-2-ylamino)propyl](1H-

indazol-5-yl)}carbonylamino)ethyl]amino)sulfonyl)-
3,5-dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-
3-carboxy propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-
4,7,10-tris

5 (carboxymethyl)cyclododecyl]acetylamino}butanoic
acid;

10 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-methyl-
3-[3-(2-3,4,5,6-tetrahydropyridylamino)propyl] (1H-
indazol-6-yl)}carbonylamino)ethyl]amino)sulfonyl)-
3,5-dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-
3-carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-
4,7,10-

15 tris(carboxymethyl)cyclododecyl]acetylamino}butanoic
acid;

20 (4S)-4-(N-{(1S)-1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[2-
(2-3,4,5,6-tetrahydropyridylamino)ethyl] (1H-
indazol-5-yl)}carbonylamino)ethyl]amino)sulfonyl)-
3,5-dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-
3-carboxy propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-
4,7,10-tris

(carboxymethyl)cyclododecyl]acetylamino}butanoic
acid;

25

(2S)-2-{{(2,6-dimethyl-4-{3-[N-(2-{2-[1,4,7,10-tetraaza-
4,7,10-tris(carboxymethyl)cyclododecyl]acetyl-
amino)ethyl)carbamoyl]propoxy}phenyl)sulfonyl]amino}
-3-({2-[2-(2-3,4,5,6-
30 tetrahydropyridylamino)ethyl] (2-hydro-1H-indazol-5-
yl)}carbonylamino)propanoic acid;

35

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-({[(1S)-1-carboxy-2-({1-
[2-(2-3,4,5,6-tetrahydropyridylamino)ethyl] (1H-
indazol-5-
yl)}carbonylamino)ethyl]amino)sulfonyl]phenyl]
phenyl)sulfonyl]amino]ethyl}carbamoyl)-3-

carboxypropyl] carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

5 (4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-({1-[3-(3,4,5,6-tetrahydropyrimidin-2-ylamino)propyl](1H-indazol-5-yl))carbonylamino)ethyl]amino)sulfonyl]phenyl]phenyl)sulfonyl]amino}ethyl]carbamoyl}-3-

10 carboxy propyl]carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

15 (2S)-3-({3-[(imidazol-2-ylamino) methyl]-1-methyl(1H-indazol-6-yl))carbonylamino)-2-({[4-(4-[(2-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino)ethyl]amino)sulfonyl]phenyl)phenyl]sulfonyl]amino}propanoic acid;

20 3-[(7-{3-[(6-[(1E)-1-aza-2-(2-sulfophenyl)vinyl]amino)(3-pyridyl))carbonylamino]propoxy)-1-[3-(imidazol-2-ylamino)propyl](1H-indazol-5-yl))-carbonylamino](2S)-2-[(2,4,6-trimethylphenyl)sulfonyl]-amino}propanoic acid;
and

30 3-[[1-[3-(imidazol-2-ylamino)propyl]-7-(3-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]-acetylamino}propoxy)(1H-indazol-5-yl)]carbonylamino]-2-[(2,4,6-trimethylphenyl)sulfonyl]amino}propanoic acid;

35 or a pharmaceutically acceptable salt form thereof.

7. A kit comprising a compound of Claim 2, or a pharmaceutically acceptable salt form thereof and a pharmaceutically acceptable carrier.
- 5 8. A kit according to Claim 7, wherein the kit further comprises one or more ancillary ligands and a reducing agent.
9. A kit according to Claim 8, wherein the ancillary
10 ligands are tricine and TPPTS.
10. A kit according to Claim 8, wherein the reducing agent is tin(II).
- 15 11. A diagnostic or therapeutic metallopharmaceutical composition, comprising: a metal, a chelator capable of chelating the metal and a targeting moiety, wherein the targeting moiety is bound to the chelator, is an indazole nonpeptide and binds to a
20 receptor that is upregulated during angiogenesis and the compound has 0-1 linking groups between the targeting moiety and chelator.
12. A composition according to Claim 11, wherein the
25 metallopharmaceutical is a diagnostic radiopharmaceutical, the metal is a radioisotope selected from the group: ^{99m}Tc , ^{95}Tc , ^{111}In , ^{62}Cu , ^{64}Cu , ^{67}Ga , and ^{68}Ga , and the linking group is present between the targeting moiety and chelator.
- 30 13. A composition according to Claim 12, wherein the targeting moiety is an indazole and the receptor is $\alpha_v\beta_3$ or $\alpha_v\beta_5$.
- 35 14. A composition according to Claim 13, wherein the radioisotope is ^{99m}Tc or ^{95}Tc , the

radiopharmaceutical further comprises a first ancillary ligand and a second ancillary ligand capable of stabilizing the radiopharmaceutical.

5 15. A composition according to Claim 14, wherein the radioisotope is ^{99m}Tc .

16. A composition according to Claim 15, wherein the radiopharmaceutical is selected from the group:

10

^{99m}Tc (((4-(4-(((3-(2-(2-(3-((6-(diazenido)(3-pyridyl))carbonylamino)propoxy)-ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)-3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid) (tricine) (TPPTS);

15

^{99m}Tc (2-(2-((5-(N-(1,3-bis(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)propyl)carbamoyl)(2-pyridyl))2-diazenido) (tricine) (TPPTS);

20

25 ^{99m}Tc (2-((6-(diazenido)(3-pyridyl))carbonylamino)-4-(N-(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-ethyl)amino)sulfonyl)phenyl)phenyl)sulfonyl)-amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)butanoic acid) (tricine) (TPPTS);

30

^{99m}Tc (2-(6-((6-(diazenido)(3-pyridyl))carbonylamino)hexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-propanoic acid) (tricine) (TPPTS);

35

^{99m}Tc (2-((6-(diazenido)(3-pyridyl))carbonylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid (tricine) (TPPTS);

5 ^{99m}Tc [2-[[[5-[carbonyl]-2-pyridinyl]diazenido]-Glu(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid))

10 (tricine) (TPPTS);

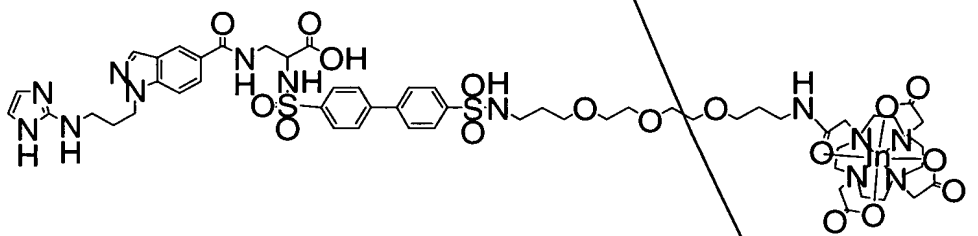
^{99m}Tc ([2-[[[5-[carbonyl]-2-pyridinyl]diazenido]-Glu-bis-[Glu(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid))]

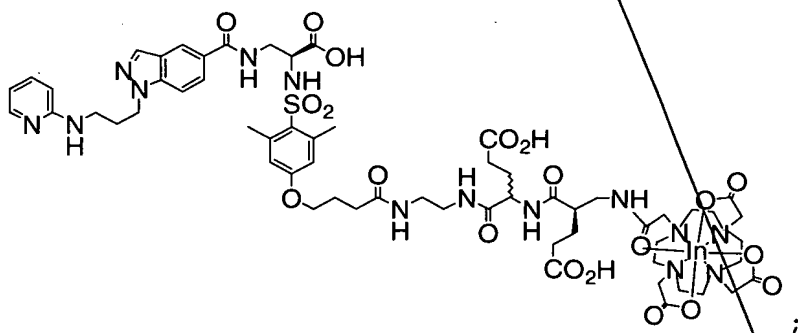
15 (tricine) (TPPTS);

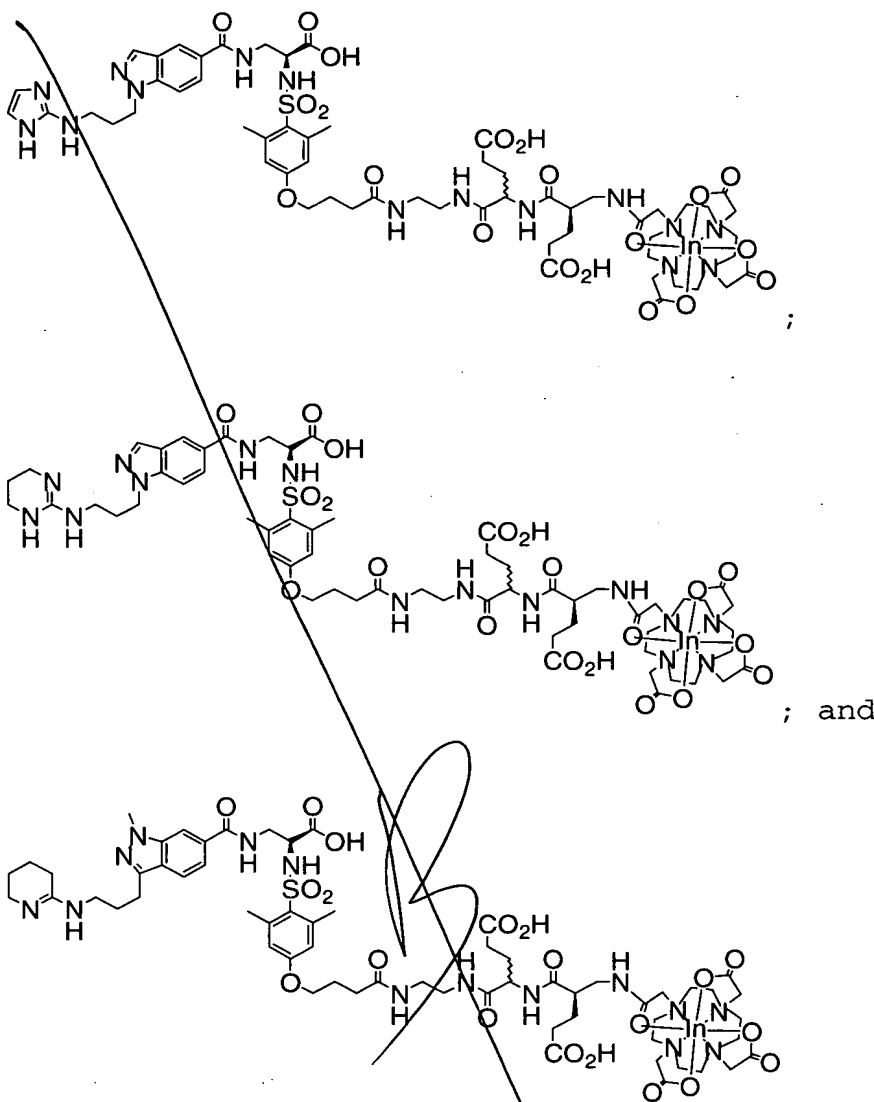
17. A composition according to Claim 13, wherein the radioisotope is ¹¹¹In.

18. A composition according to Claim 17, wherein, the

25 radiopharmaceutical is selected from the group:







5

19. A composition according to Claim 11, wherein the metallopharmaceutical is a therapeutic
- 10 radiopharmaceutical, the metal is a radioisotope selected from the group: ^{33}P , ^{125}I , ^{186}Re , ^{188}Re , ^{153}Sm , ^{166}Ho , ^{177}Lu , ^{149}Pm , ^{90}Y , ^{212}Bi , ^{103}Pd , ^{109}Pd , ^{159}Gd , ^{140}La , ^{198}Au , ^{199}Au , ^{169}Yb , ^{175}Yb , ^{165}Dy , ^{166}Dy , ^{67}Cu , ^{105}Rh , ^{111}Ag , and ^{192}Ir , the targeting moiety is an indazole nonpeptide and the
- 15 linking group is present between the targeting moiety and chelator.

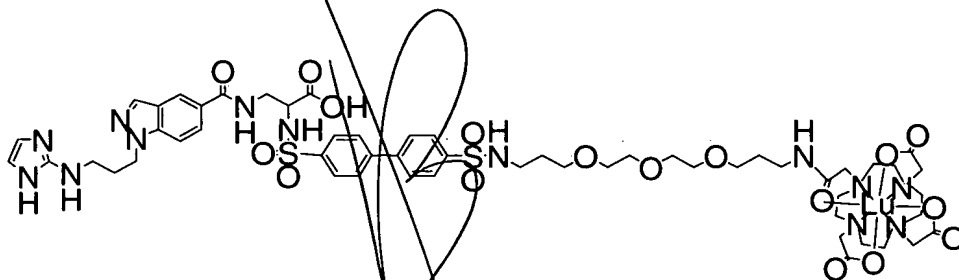
20. A composition according to Claim 19, wherein the targeting moiety is an indazole and the receptor is $\alpha_v\beta_3$ or $\alpha_v\beta_5$.

5 21. A composition according to Claim 20, wherein the radioisotope is ^{153}Sm .

22. A composition according to Claim 20, wherein the radioisotope is ^{177}Lu .

10

23. A composition according to Claim 22, wherein the radiopharmaceutical is

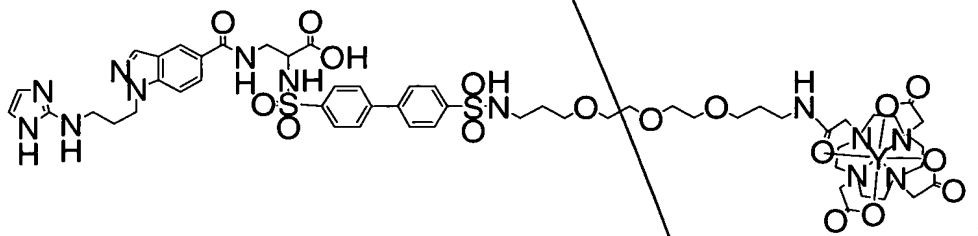


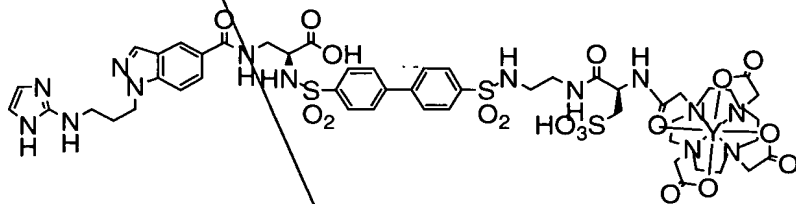
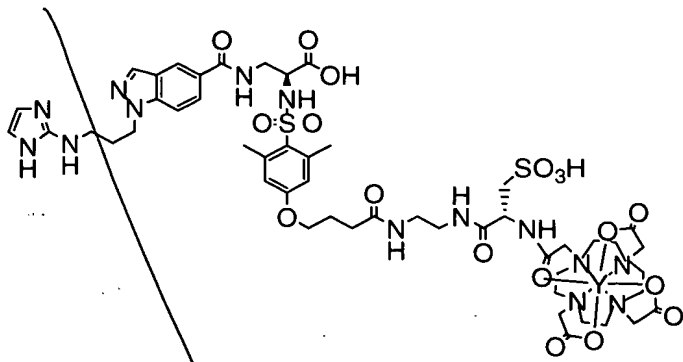
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24. A composition according to Claim 20, wherein the radioisotope is ^{90}Y .

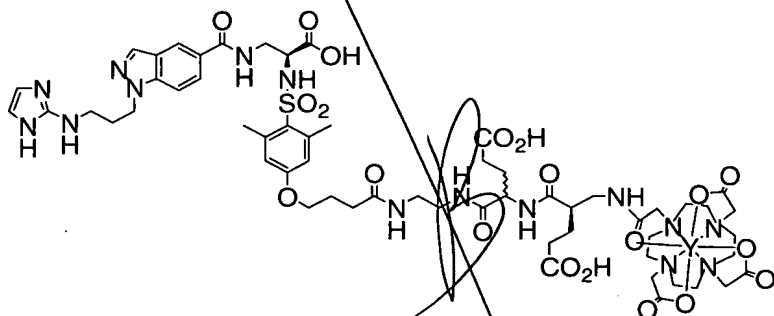
25. A composition according to Claim 24, wherein, the radiopharmaceutical is selected from the group:

20





; and



5

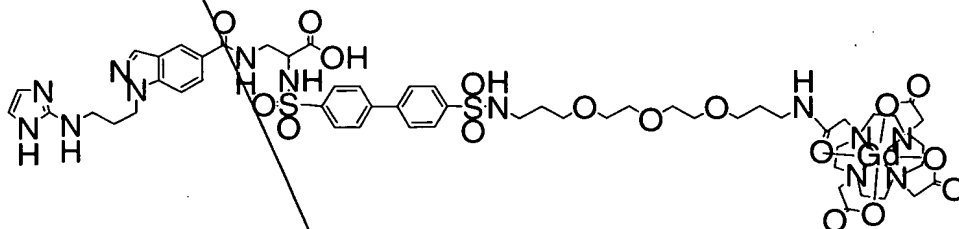
26. A composition according to Claim 11, wherein the
 metallopharmaceutical is a MRI contrast agent, the
 metal is a paramagnetic metal ion selected from the
 group: Gd(III), Dy(III), Fe(III), and Mn(II), the
 targeting moiety is an indazole nonpeptide and the
 linking group is present between the targeting
 moiety and chelator.

15

27. A composition according to Claim 26, wherein the
 targeting moiety is an indazole and the receptor is
 $\alpha_v\beta_3$ or $\alpha_v\beta_5$.

28. A composition according to Claim 27, wherein the metal ion is Gd(III).

29. A composition according to Claim 28, wherein the contrast agent is



30. A composition according to Claim 11, wherein the metallopharmaceutical is a X-ray contrast agent, the metal is selected from the group: Re, Sm, Ho, Lu, Pm, Y, Bi, Pd, Gd, La, Au, Au, Yb, Dy, Cu, Rh, Ag, and Ir, the targeting moiety comprises an indazole, the receptor is $\alpha_v\beta_3$ or $\alpha_v\beta_5$, and the linking group is present between the targeting moiety and chelator.

31. A method of treating rheumatoid arthritis in a patient comprising: administering a therapeutic radiopharmaceutical of Claim 19 capable of localizing in new angiogenic vasculature to a patient by injection or infusion.

32. A method of treating cancer in a patient comprising: administering to a patient in need thereof a therapeutic radiopharmaceutical of Claim 19 by injection or infusion.

33. A method of treating restenosis in a patient comprising: administering to a patient, either systemically or locally, a therapeutic radiopharmaceutical of Claim 19 capable of

localizing in the restenotic area and delivering an effective dose of radiation.

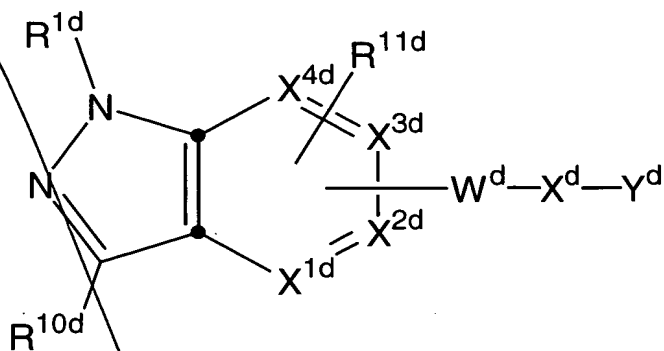
34. A method of imaging therapeutic angiogenesis in a patient comprising: (1) administering a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11 to a patient by injection or infusion; (2) imaging the area of the patient wherein the desired formation of new blood vessels is located.
35. A method of imaging atherosclerosis in a patient comprising: (1) administering a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11 to a patient by injection or infusion; (2) imaging the area of the patient wherein the atherosclerosis is located.
36. A method of imaging restenosis in a patient comprising: (1) administering a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11 to a patient by injection or infusion; (2) imaging the area of the patient wherein the restenosis is located.
37. A method of imaging cardiac ischemia in a patient comprising: (1) administering a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11 to a patient by injection or infusion; (2) imaging the area of the myocardium wherein the ischemic region is located.
38. A method of imaging myocardial reperfusion injury in a patient comprising: (1) administering a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11 to a patient by injection or infusion; (2) imaging the

area of myocardium wherein the reperfusion injury is located.

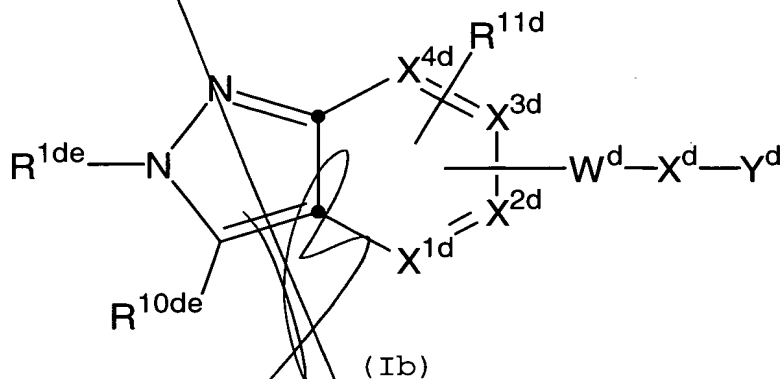
39. A method of imaging cancer in a patient comprising:
5 (1) administering a diagnostic radiopharmaceutical of Claim 12 to a patient by injection or infusion;
(2) imaging the patient using planar or SPECT gamma scintigraphy, or positron emission tomography.
- 10 40. A method of imaging cancer in a patient comprising:
(1) administering a MRI contrast agent of Claim 27;
and (2) imaging the patient using magnetic resonance imaging.
- 15 41. A method of imaging cancer in a patient comprising:
(1) administering a X-ray contrast agent of Claim 30; and (2) imaging the patient using X-ray computed tomography.
- 20 42. A compound, comprising: a targeting moiety and a surfactant, wherein the targeting moiety is bound to the surfactant, is an indazole nonpeptide, and binds to a receptor that is upregulated during angiogenesis and the compound has 0-1 linking groups
25 between the targeting moiety and surfactant.
43. A compound according to Claim 42, wherein the linking group is present between the targeting moiety and surfactant.
- 30 44. A compound according to Claim 43, wherein the receptor is the integrin $\alpha_v\beta_3$ or $\alpha_v\beta_5$ and the compound is of the formula:

35 (Q)_d-L_n-S_f

wherein, Q is a independently a compound of Formulae (Ia) or (Ib):



(Ia)



(Ib)

including stereoisomeric forms thereof, or mixtures of stereoisomeric forms thereof, or pharmaceutically acceptable salt or prodrug forms thereof wherein:

15 X^{1d} is N, CH, C- $W^d-X^d-Y^d$, or C- L_n ;

X^{2d} is N, CH, or C- $W^d-X^d-Y^d$;

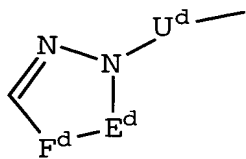
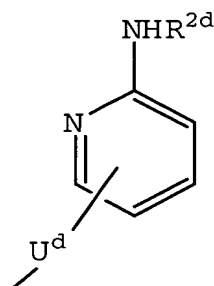
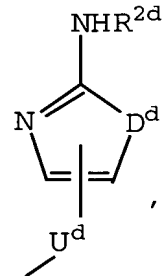
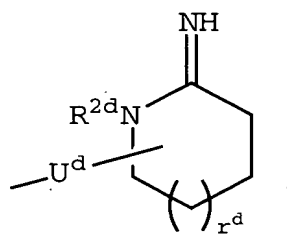
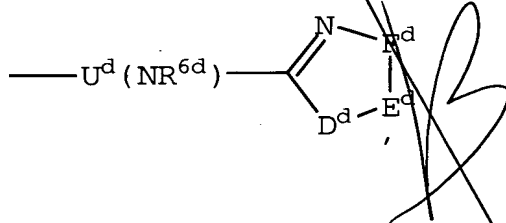
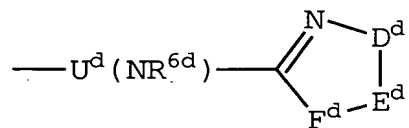
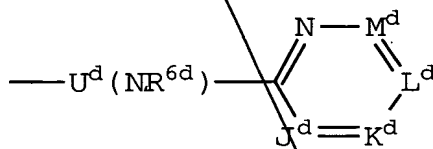
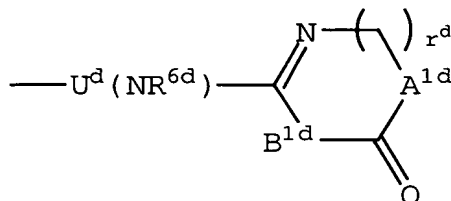
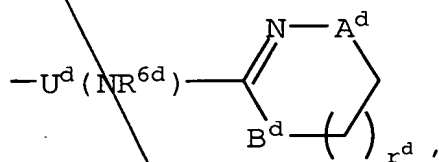
X^{3d} is N, CR^{11d} , or C- $W^d-X^d-Y^d$;

X^{4d} is N or CR^{11d} ;

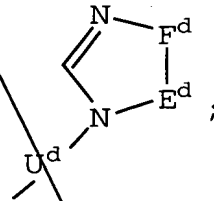
20 provided that when R^{1d} is R^{1de} then one of X^{1d} and X^{2d} is C- $W^d-X^d-Y^d$, and when R^{10d} is R^{1de} then X^{3d} is C- $W^d-X^d-Y^d$;

5 ~~R^{1d} is selected from: R^{1de}, C₁-C₆ alkyl substituted with
0-1 R^{15d} or 0-1 R^{21d}, C₃-C₆ alkenyl substituted with
0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted
with 0-1 R^{15d} or 0-1 R^{21d}, C₄-C₁₁ cycloalkylalkyl
substituted with 0-1 R^{15d} or 0-1 R^{21d}, aryl
substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d}, and
aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2
R^{11d} or 0-1 R^{21d};~~

R^{1de} is selected from:



or



5

A^d and B^d are independently $-\text{CH}_2-$, $-\text{O}-$, $-\text{N}(R^{2d})-$, or $-\text{C}(=\text{O})-$;

A^{1d} and B^{1d} are independently -CH₂- or -N(R^{3d})-;

D^d is -N(R^{2d})-, -O-, -S-, -C(=O)- or -SO₂-;

5

E^d-F^d is -C(R^{4d})=C(R^{5d})-, -N=C(R^{4d})-, -C(R^{4d})=N-, or -
C(R^{4d})₂C(R^{5d})₂-;

J^d, K^d, L^d and M^d are independently selected from:

10 -C(R^{4d})-, -C(R^{5d})- and -N-, provided that at least
one of J^d, K^d, L^d and M^d is not -N-;

R^{2d} is selected from: H, C₁-C₆ alkyl, (C₁-C₆
alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl; (C₁-C₆
15 alkyl)aminocarbonyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl,
C₄-C₁₁ cycloalkylalkyl, aryl, heteroaryl(C₁-C₆
alkyl)carbonyl, heteroarylcabonyl,
aryl(C₁-C₆ alkyl)-, (C₁-C₆ alkyl)carbonyl-,
arylcabonyl, C₁-C₆ alkylsulfonyl, arylsulfonyl,
20 aryl(C₁-C₆ alkyl)sulfonyl, heteroarylsulfonyl,
heteroaryl(C₁-C₆ alkyl)sulfonyl, aryloxy carbonyl, and
aryl(C₁-C₆ alkoxy)carbonyl, wherein said aryl groups
are substituted with 0-2 substituents selected from
the group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy,
25 halo, CF₃, and nitro;

R^{3d} is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,
C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and
heteroaryl(C₁-C₆ alkyl)-;

30

R^{4d} and R^{5d} are independently selected from: H, C₁-C₄
alkoxy, NR^{2d}R^{3d}, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl,
C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁
cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆

alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, arylcarbonyl,
or

alternatively, when substituents on adjacent atoms, R^{4d}

5 and R^{5d} can be taken together with the carbon atoms
to which they are attached to form a 5-7 membered
carbocyclic or 5-7 membered heterocyclic aromatic or
non-aromatic ring system, said carbocyclic or
heterocyclic ring being optionally substituted with
10 0-2 groups selected from: C₁-C₄ alkyl, C₁-C₄ alkoxy,
halo, cyano, amino, CF₃, and NO₂;

U^d is selected from:

- (CH₂)_{n^d}-,
- 15 - (CH₂)_{n^d}(CR^{7d}=CR^{8d})(CH₂)_{m^d}-,
- (CH₂)_{n^d}(C≡C)(CH₂)_{m^d}-,
- (CH₂)_{t^d}Q(CH₂)_{m^d}-,
- (CH₂)_{n^d}O(CH₂)_{m^d}-,
- (CH₂)_{n^d}N(R^{6d})(CH₂)_{m^d}-,
- 20 - (CH₂)_{n^d}C(=O)(CH₂)_{m^d}-,
- (CH₂)_{n^d}(C=O)N(R^{6d})(CH₂)_{m^d}-,
- (CH₂)_{n^d}N(R^{6d})(C=O)(CH₂)_{m^d}-, and
- (CH₂)_{n^d}S(O)_{p^d}(CH₂)_{m^d}-;

25 wherein one or more of the methylene groups in U^d is
optionally substituted with R^{7d};

Q^d is selected from 1,2-cycloalkylene, 1,2-phenylene,
1,3-phenylene, 1,4-phenylene, 2,3-pyridinylene, 3,4-
30 pyridinylene, 2,4-pyridinylene, and 3,4-
pyridazinylene;

R^{6d} is selected from: H, C₁-C₄ alkyl, or benzyl;

R^{7d} and R^{8d} are independently selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and heteroaryl(C₀-C₆ alkyl)-;

R^{10d} is selected from: H, R^{1de}, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, N(R^{6d})₂, halogen, NO₂, CN, CF₃, CO₂R^{17d}, C(=O)R^{17d}, CONR^{17d}R^{20d}, -SO₂R^{17d}, -SO₂NR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₆ alkenyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, aryl substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

R^{10de} is selected from: H, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, N(R^{6d})₂, halogen, NO₂, CN, CF₃, CO₂R^{17d}, C(=O)R^{17d}, CONR^{17d}R^{20d}, -SO₂R^{17d}, -SO₂NR^{17d}R^{20d}, C₁-C₆ alkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₆ alkenyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₃-C₇ cycloalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R^{15d} or 0-1 R^{21d}, aryl substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d}, and aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15d} or 0-2 R^{11d} or 0-1 R^{21d};

R^{11d} is selected from H, halogen, CF₃, CN, NO₂, hydroxy, NR^{2d}R^{3d}, C₁-C₄ alkyl substituted with 0-1 R^{21d}, C₁-C₄ alkoxy substituted with 0-1 R^{21d}, aryl substituted with 0-1 R^{21d}, aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{21d}, (C₁-C₄ alkoxy)carbonyl substituted with 0-1 R^{21d}, (C₁-C₄ alkyl)carbonyl substituted with 0-1 R^{21d},

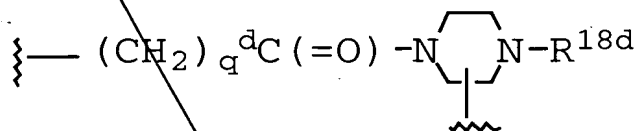
C₁-C₄ alkylsulfonyl substituted with 0-1 R^{21d}, and
 C₁-C₄ alkylaminosulfonyl substituted with 0-1 R^{21d};

W^d is selected from:

- 5 -(C(R^{12d})₂)_q^dC(=O)N(R^{13d})-, and
 -C(=O)-N(R^{13d})-(C(R^{12d})₂)_q^d-;

X^d is -C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-; or

- 10 alternatively, W^d and X^d can be taken together to be



- 15 R^{12d} is selected from H, halogen, C₁-C₆ alkyl, C₂-C₆
 alkenyl, C₂-C₆ alkynyl, C₃-C₇ cycloalkyl,
 C₄-C₁₀ cycloalkylalkyl, (C₁-C₄ alkyl)carbonyl, aryl,
 and aryl(C₁-C₆ alkyl)-;

- 20 R^{13d} is selected from H, C₁-C₆ alkyl, C₃-C₇
 cycloalkylmethyl, and aryl(C₁-C₆ alkyl)-;

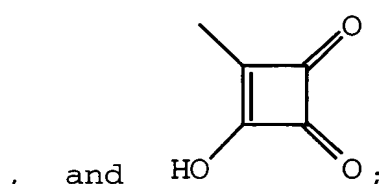
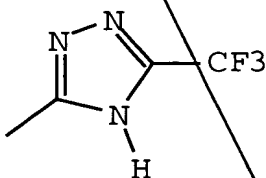
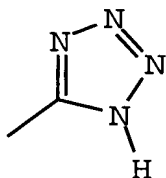
- 25 R^{14d} is selected from:
 H, C₁-C₆ alkylthio(C₁-C₆ alkyl)-, aryl(C₁-C₁₀
 alkylthioalkyl)-, aryl(C₁-C₁₀ alkoxyalkyl)-, C₁-C₁₀
 alkyl, C₁-C₁₀ alkoxyalkyl, C₁-C₆ hydroxyalkyl, C₂-C₁₀
 alkenyl, C₂-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-C₁₀
 cycloalkylalkyl, aryl(C₁-C₆ alkyl)-, heteroaryl(C₁-C₆
 alkyl)-, aryl, heteroaryl, CO₂R^{17d}, C(=O)R^{17d}, and
 CONR^{17d}R^{20d}, provided that any of the above alkyl,
 cycloalkyl, aryl or heteroaryl groups may be
 unsubstituted or substituted independently with 0-1
 R^{16d} or 0-2 R^{11d};
- 30

R^{15d} is selected from:

H, R^{16d}, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl,
 C₁-C₁₀ alkylaminoalkyl, C₁-C₁₀ dialkylaminoalkyl,
 5 (C₁-C₁₀ alkyl)carbonyl, aryl(C₁-C₆ alkyl)carbonyl,
 C₁-C₁₀ alkenyl, C₁-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-
 C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-,
 heteroaryl(C₁-C₆ alkyl)-, aryl, heteroaryl, CO₂R^{17d},
 C(=O)R^{17d}, CONR^{17d}R^{20d}, SO₂R^{17d}, and SO₂NR^{17d}R^{20d},
 10 provided that any of the above alkyl, cycloalkyl,
 aryl or heteroaryl groups may be unsubstituted or
 substituted independently with 0-2 R^{11d};

Y^d is selected from:

15 -COR^{19d}, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -
 CONHSO₂R^{17d}, -CONHSO₂NHR^{17d}, -NHCOCF₃, -NHCONHSO₂R^{17d},
 -NHSO₂R^{17d}, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H, -
 SO₂NHCOR^{17d}, -SO₂NHCO₂R^{17d},



R^{16d} is selected from:

-N(R^{20d})-C(=O)-O-R^{17d},
 25 -N(R^{20d})-C(=O)-R^{17d},
 -N(R^{20d})-C(=O)-NH-R^{17d},
 -N(R^{20d})SO₂-R^{17d}, and
 -N(R^{20d})SO₂-NR^{20d}R^{17d};

30 R^{17d} is selected from:

C₁-C₁₀ alkyl optionally substituted with a bond to
 L_n, C₃-C₁₁ cycloalkyl optionally substituted with a
 bond to L_n, aryl(C₁-C₆ alkyl)- optionally substituted
 with a bond to L_n, (C₁-C₆ alkyl)aryl optionally
 5 substituted with a bond to L_n, heteroaryl(C₁-C₆
 alkyl)- optionally substituted with a bond to L_n,
 (C₁-C₆ alkyl)heteroaryl optionally substituted with a
 bond to L_n, biaryl(C₁-C₆ alkyl)- optionally
 substituted with a bond to L_n, heteroaryl optionally
 10 substituted with a bond to L_n, aryl optionally
 substituted with a bond to L_n, biaryl optionally
 substituted with a bond to L_n, and a bond to L_n,
 wherein said aryl, biaryl or heteroaryl groups are
 also optionally substituted with 0-3 substituents
 15 selected from the group: C₁-C₄ alkyl, C₁-C₄ alkoxy,
 aryl, heteroaryl, halo, cyano, amino, CF₃, and NO₂;

R^{18d} is selected from:

-H,
 20 -C(=O)-O-R^{17d},
 -C(=O)-R^{17d},
 -C(=O)-NH-R^{17d},
 -SO₂-R^{17d}, and
 -SO₂-NR^{20d}R^{17d};

25 R^{19d} is selected from: hydroxy, C₁-C₁₀ alkyloxy,
 C₃-C₁₁ cycloalkyloxy, aryloxy, aryl(C₁-C₆ alkoxy)-,
 C₃-C₁₀ alkylcarbonyloxyalkyloxy, C₃-C₁₀
 alkoxy carbonyloxyalkyloxy,
 30 C₂-C₁₀ alkoxy carbonylalkyloxy,
 C₅-C₁₀ cycloalkylcarbonyloxyalkyloxy,
 C₅-C₁₀ cycloalkoxy carbonyloxyalkyloxy,
 C₅-C₁₀ cycloalkoxy carbonylalkyloxy,
 C₇-C₁₁ aryloxy carbonylalkyloxy,

C₈-C₁₂ aryloxy carbonyloxyalkyloxy,
 C₈-C₁₂ aryl carbonyloxyalkyloxy,
 C₅-C₁₀ alkoxyalkyl carbonyloxyalkyloxy,
 C₅-C₁₀ (5-alkyl-1,3-dioxo-cyclopenten-2-one-
 5 yl)methyloxy, C₁₀-C₁₄ (5-aryl-1,3-dioxo-cyclopenten-
 2-one-yl)methyloxy, and
 (R^{11d}) (R^{12d}) N-(C₁-C₁₀ alkoxy)-;

R^{20d} is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,
 10 C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and
 heteroaryl(C₁-C₆ alkyl)-;

R^{21d} is selected from: COOH and NR^{6d}₂;

m^d is 0-4;

15 n^d is 0-4;

t^d is 0-4;

p^d is 0-2;

q^d is 0-2; and

r^d is 0-2;

20

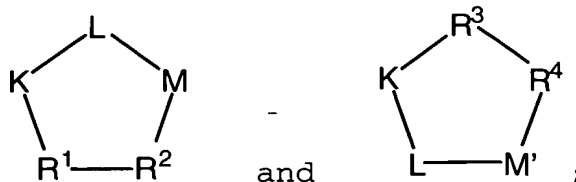
with the following provisos:

(1) t^d, n^d, m^d and q^d are chosen such that the number of
 atoms connecting R^{1d} and Y^d is in the range of 10-14;
 and

25 (2) n^d and m^d are chosen such that the value of n^d plus
 m^d is greater than one unless U^d is
 -(CH₂)_t^d Q^d (CH₂)_m^d-;

or Q is a peptide selected from the group:

30



R¹ is L-valine, D-valine or L-lysine optionally substituted on the ε amino group with a bond to L_n;

5 R² is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L_n;

10 R³ is D-valine;

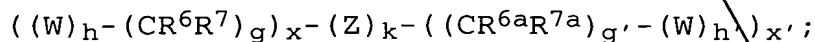
R⁴ is D-tyrosine substituted on the hydroxy group with a bond to L_n;

15 provided that one of R¹ and R² in each Q is substituted with a bond to L_n, and further provided that when R² is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

20 provided that at least one Q is a compound of Formula Ia or Ib;

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

25 L_n is a linking group having the formula:



W is independently selected at each occurrence from the group: O, S, NH, NHC(=O), C(=O)NH, NR⁸C(=O), C(=O)N
 30 R⁸, C(=O), C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO₂, SO₂NH, (OCH₂CH₂)₂₀₋₂₀₀, (CH₂CH₂O)₂₀₋₂₀₀, (OCH₂CH₂CH₂)₂₀₋₂₀₀, (CH₂CH₂CH₂O)₂₀₋₂₀₀, and (aa)_t;

aa is independently at each occurrence an amino acid;

5 Z is selected from the group: aryl substituted with 0-3 R^{10} , C_{3-10} cycloalkyl substituted with 0-3 R^{10} , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R^{10} ;

10 R^6 , R^{6a} , R^7 , R^{7a} , and R^8 are independently selected at each occurrence from the group: H, =O, COOH, SO_3H , PO_3H , C_1-C_5 alkyl substituted with 0-3 R^{10} , aryl substituted with 0-3 R^{10} , benzyl substituted with 0-3 R^{10} , and C_1-C_5 alkoxy substituted with 0-3 R^{10} ,
15 $NHC(=O)R^{11}$, $C(=O)NHR^{11}$, $NHC(=O)NHR^{11}$, NHR^{11} , R^{11} , and a bond to S_f ;

R^{10} is independently selected at each occurrence from the group: a bond to S_f , $COOR^{11}$, $C(=O)NHR^{11}$, $NHC(=O)R^{11}$,
20 OH, NHR^{11} , SO_3H , PO_3H , $-OPO_3H_2$, $-OSO_3H$, aryl substituted with 0-3 R^{11} , C_{1-5} alkyl substituted with 0-1 R^{12} , C_{1-5} alkoxy substituted with 0-1 R^{12} , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R^{11} ;

25 R^{11} is independently selected at each occurrence from the group: H, alkyl substituted with 0-1 R^{12} , aryl substituted with 0-1 R^{12} , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-1 R^{12} , C_{3-10} cycloalkyl substituted with 0-1 R^{12} , and a bond to S_f ;

30

R¹² is a bond to S_f;

k is selected from 0, 1, and 2;

h is selected from 0, 1, and 2;

5 h' is selected from 0, 1, and 2;

g is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

g' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

t' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

x is selected from 0, 1, 2, 3, 4, and 5;

10 x' is selected from 0, 1, 2, 3, 4, and 5;

S_f is a surfactant which is a lipid or a compound of the

formula: $A^9-E^1-A^{10}$;

15 A⁹ is selected from the group: OH and OR²⁷;

A¹⁰ is OR²⁷;

R²⁷ is C(=O)C₁₋₂₀ alkyl;

20

E¹ is C₁₋₁₀ alkylene substituted with 1-3 R²⁸;

R²⁸ is independently selected at each occurrence from the
group: R³⁰, -PO₃H-R³⁰, =O, -CO₂R²⁹, -C(=O)R²⁹,

25 -C(=O)N(R²⁹)₂, -CH₂OR²⁹, -OR²⁹, -N(R²⁹)₂, C₁-C₅
alkyl, and C₂-C₄ alkenyl;

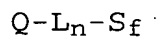
R²⁹ is independently selected at each occurrence from the
group: R³⁰, H, C₁-C₆ alkyl, phenyl, benzyl, and
30 trifluoromethyl;

R³⁰ is a bond to L_n;

and a pharmaceutically acceptable salt thereof.

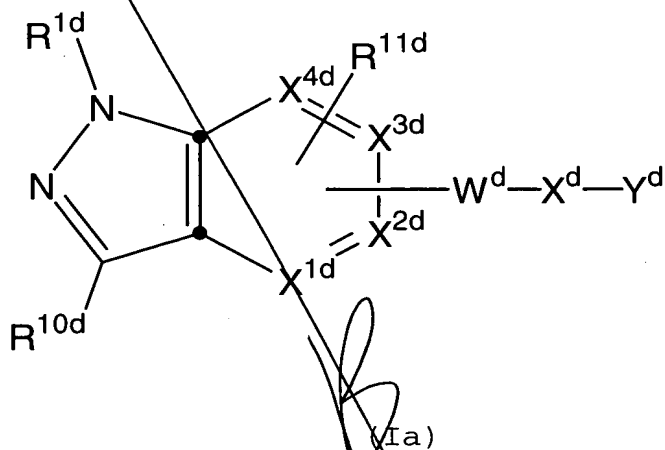
45. A compound according to Claim 44, wherein the compound is of the formula:

5

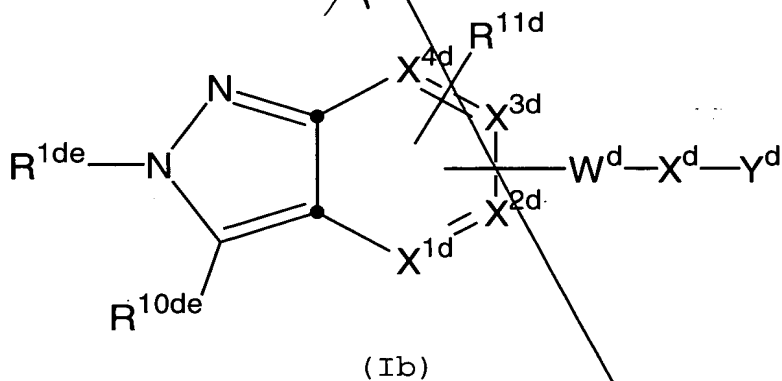


wherein: Q is a compound of Formula (Ia) or (Ib):

10



15



~~R^{1d} is selected from:

$$-U^d(NR^{6d})-\text{C}_6H_4(B^d)-A^d$$

$$-U^d(NR^{6d})-\text{C}_6H_4(B^{1d})-A^{1d}$$

$$-U^d(NR^{6d})-\text{C}_6H_4(J^d=K^d)-M^d-L^d$$

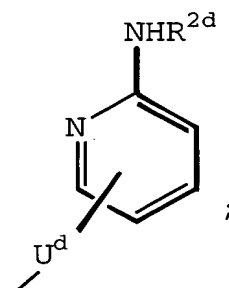
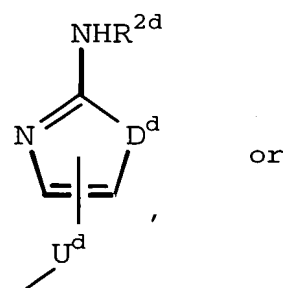
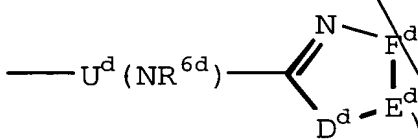
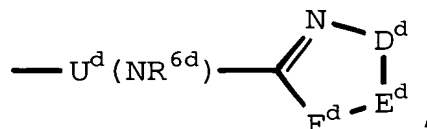
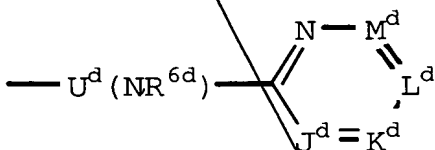
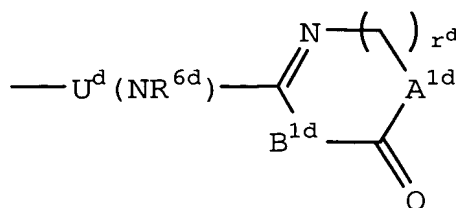
$$-U^d(NR^{6d})-\text{C}_6H_4(D^d)-E^d$$

$$-U^d(NR^{6d})-\text{C}_6H_4(D^d)-E^d$$

$$-U^d-\text{C}_6H_4(D^d)-NHR^{2d}$$

A^d and B^d are independently $-CH_2-$, $-O-$, $-N(R^{2d})-$, or

A^{1d} and B^{1d} are independently $-CH_2-$ or $-N(R^{3d})-$;

D^d is $-N(R^{2d})-$, $-O-$, $-S-$, $-C(=O)-$ or $-SO_2-$;~~

A^{1d} and B^{1d} are independently -CH₂- or -N(R^{3d})-;

D^d is -N(R^{2d})-, -O-, -S-, -C(=O)- or -SO₂-;

$E^{d,F}$ is $-C(R^{4d})=C(R^{5d})-$, $-N=C(R^{4d})-$, $-C(R^{4d})=N-$, or $-C(R^{4d})_2C(R^{5d})_2-$;

J^d , K^d , L^d and M^d are independently selected from:

5 $-C(R^{4d})-$, $-C(R^{5d})-$ and $-N-$, provided that at least one of J^d , K^d , L^d and M^d is not $-N-$;

R^{2d} is selected from: H, C_1-C_6 alkyl, $(C_1-C_6$
alkyl)carbonyl, $(C_1-C_6$ alkoxy)carbonyl, C_1-C_6
10 alkylaminocarbonyl, C_3-C_6 alkenyl, C_3-C_7 cycloalkyl,
 C_4-C_{11} cycloalkylalkyl, aryl, heteroaryl(C_1-C_6
alkyl)carbonyl, heteroarylcarbonyl, aryl(C_1-C_6
alkyl)-, $(C_1-C_6$ alkyl)carbonyl, arylcarbonyl,
alkylsulfonyl, arylsulfonyl, aryl(C_1-C_6
15 alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C_1-C_6
alkyl)sulfonyl, aryloxy carbonyl, and aryl(C_1-C_6
alkoxy)carbonyl, wherein said aryl groups are
substituted with 0-2 substituents selected from the
group: C_1-C_4 alkyl, C_1-C_4 alkoxy, halo, CF_3 , and
20 nitro;

R^{3d} is selected from: H, C_1-C_6 alkyl, C_3-C_7 cycloalkyl,
 C_4-C_{11} cycloalkylalkyl, aryl, aryl(C_1-C_6 alkyl)-, and
heteroaryl(C_1-C_6 alkyl)-;

25 R^{4d} and R^{5d} are independently selected from: H, C_1-C_4
alkoxy, $NR^{2d}R^{3d}$, halogen, NO_2 , CN, CF_3 , C_1-C_6 alkyl,
 C_3-C_6 alkenyl, C_3-C_7 cycloalkyl, C_4-C_{11}
cycloalkylalkyl, aryl, aryl(C_1-C_6 alkyl)-, C_2-C_7
30 alkylcarbonyl, and arylcarbonyl or

alternatively, when substituents on adjacent atoms, R^{4d}
and R^{5d} can be taken together with the carbon atoms

to which they are attached to form a 5-7 membered carbocyclic or 5-7 membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with
 5 0-2 groups selected from: C₁-C₄ alkyl, C₁-C₄ alkoxy, halo, cyano, amino, CF₃, and NO₂;

U^d is selected from:

- (CH₂)_n^d -,
 - (CH₂)_n^d (CR^{7d}=CR^{8d}) (CH₂)_m^d -,
 10 - (CH₂)_t^d Q^d (CH₂)_m^d -,
 - (CH₂)_n^d O (CH₂)_m^d -,
 - (CH₂)_n^d N (R^{6d}) (CH₂)_m^d -,
 - (CH₂)_n^d C (=O) (CH₂)_m^d -, and
 - (CH₂)_n^d S (O)_p^d (CH₂)_m^d -;

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wherein one or more of the methylene groups in U^d is optionally substituted with R^{7d};

Q^d is selected from 1,2-phenylene, 1,3-phenylene, 2,3-pyridinylene, 3,4-pyridinylene, and 2,4-pyridinylene;
 20

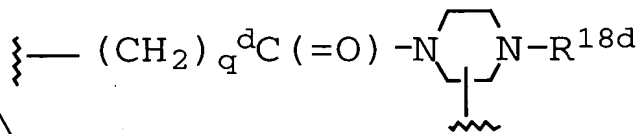
R^{6d} is selected from: H, C₁-C₄ alkyl, and benzyl;

25 R^{7d} and R^{8d} are independently selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, and heteroaryl(C₀-C₆ alkyl)-;

30 W^d is -C(=O)-N(R^{13d})-(C(R^{12d})₂)_q^d -;

X^d is $-C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-$;

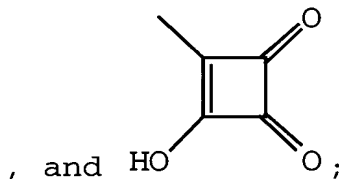
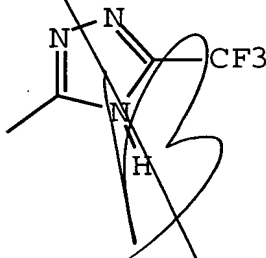
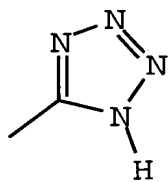
alternatively, W^d and X^d can be taken together to be



R^{12d} is H or C_1-C_6 alkyl;

Y^d is selected from:

$-COR^{19d}$, $-SO_3H$,



Z is selected from the group: aryl substituted with 0-1 R^{10} , C_{3-10} cycloalkyl substituted with 0-1 R^{10} , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-1 R^{10} ;

R^6 , R^{6a} , R^7 , R^{7a} , and R^8 are independently selected at each occurrence from the group: H, =O, COOH, SO_3H , C_1-C_5 alkyl substituted with 0-1 R^{10} , aryl substituted with 0-1 R^{10} , benzyl substituted with 0-1 R^{10} , and C_1-C_5 alkoxy substituted with 0-1 R^{10} , $NHC(=O)R^{11}$, $C(=O)NHR^{11}$, $NHC(=O)NHR^{11}$, NHR^{11} , R^{11} , and a bond to S_f ;

k is 0 or 1;

S_f is a surfactant which is a lipid or a compound of the

formula: $A^9-E^1-A^{10}$;

A⁹ is OR²⁷;

A¹⁰ is OR²⁷;

R²⁷ is C(=O)C₁₋₁₅ alkyl;

E¹ is C₁₋₄ alkylene substituted with 1-3 R²⁸;

R²⁸ is independently selected at each occurrence from the group: R³⁰, -PO₃H-R³⁰, =O, -CO₂R²⁹, -C(=O)R²⁹, -CH₂OR²⁹, -OR²⁹, and C₁-C₅ alkyl;

R²⁹ is independently selected at each occurrence from the group: R³⁰, H, C₁-C₆ alkyl, phenyl, and benzyl;

R³⁰ is a bond to L_n;

and a pharmaceutically acceptable salt thereof.

46. A compound according to Claim 45, wherein the present invention provides a compound selected from the group:

DPPE-2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid-dodecanoate conjugate;

~~ω -amino-PEG₃₄₀₀-2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid; and~~

5 ~~ω -amino-PEG₃₄₀₀-Glu-(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)-propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic acid)₂.~~

- 10 47. An ultrasound contrast agent composition, comprising:
- (a) a compound of Claim 44, comprising: an indazole that binds to the integrin $\alpha_v\beta_3$ or $\alpha_v\beta_5$ a surfactant and a linking group between the indazole and the surfactant;
- 15 (b) a parenterally acceptable carrier; and,
- (c) an echogenic gas.

20 48. An ultrasound contrast agent composition of Claim 47, further comprising: 1,2-dipalmitoyl-sn-glycero-3-phosphatidic acid, 1,2-dipalmitoyl-sn-glycero-3-phosphatidylcholine, and N-(methoxypolyethylene glycol 5000 carbamoyl)-1,2-dipalmitoyl-sn-glycero-3-phosphatidylethanolamine

25 49. An ultrasound contrast agent composition of Claim 48, wherein the echogenic gas is a C₂₋₅ perfluorocarbon.

30 50. A method of imaging cancer in a patient comprising:

(1) administering, by injection or infusion, a ultrasound contrast agent composition of Claim 44 to a patient; and (2) imaging the patient using sonography.

51. A method of imaging therapeutic angiogenesis in a patient comprising: (1) administering, by injection or infusion, an ultrasound contrast agent composition of Claim 42 to a patient; (2) imaging the area of the patient wherein the desired formation of new blood vessels is located.
52. A method of imaging atherosclerosis in a patient comprising: (1) administering, by injection or infusion, an ultrasound contrast agent composition of Claim 42 to a patient; (2) imaging the area of the patient wherein the atherosclerosis is located.
53. A method of imaging restenosis in a patient comprising: (1) administering, by injection or infusion, an ultrasound contrast agent composition of Claim 42 to a patient; (2) imaging the area of the patient wherein the restenosis is located.
54. A method of imaging cardiac ischemia in a patient comprising: (1) administering, by injection or infusion, an ultrasound contrast agent composition of Claim 42 to a patient; (2) imaging the area of the myocardium wherein the ischemic region is located.
55. A method of imaging myocardial reperfusion injury in a patient comprising: (1) administering, by injection or infusion, an ultrasound contrast agent composition of Claim 42 to a patient; (2) imaging the area of myocardium wherein the reperfusion injury is located.
56. A therapeutic radiopharmaceutical composition, comprising:
(a) a therapeutic radiopharmaceutical of Claim 19; and,

(b) a parenterally acceptable carrier.

57. A diagnostic pharmaceutical composition, comprising:
(a) a diagnostic radiopharmaceutical, a MRI contrast agent, or a X-ray contrast agent of Claim 11; and,
(b) a parenterally acceptable carrier.

58. A kit for treating cancer, comprising a compound of Claim 1, or a pharmaceutically acceptable salt thereof, and at least one agent selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

59. A kit according to claim 58 wherein said kit comprises a plurality of separate containers, wherein at least one of said containers contains a compound of Claim 1, or a pharmaceutically acceptable salt thereof, and at least another of said containers contains one or more agents selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

60. A kit according to Claim 58, wherein the chemotherapeutic agent is selected from the group consisting of mitomycin, tretinoin, ribomustin, gemcitabine, vincristine, etoposide, cladribine, mitobronitol, methotrexate, doxorubicin, carboquone, pentostatin, nitracrine, zinostatin, cetorelix, letrozole, raltitrexed, daunorubicin, fadrozole, fotemustine, thymalfasin, sobuzoxane, nedaplatin, cytarabine, bicalutamide, vinorelbine, vesnarinone, aminogluthethimide, amsacrine, proglumide, elliptinium acetate, ketanserin, doxifluridine, etretinate, isotretinoin, streptozocin, nimustine,

vindesine, flutamide, drogenil, butocin, carmofur,
 razoxane, sizofilan, carboplatin, mitolactol,
 tegafur, ifosfamide, prednimustine, picibanil,
 levamisole, teniposide, improsulfan, enocitabine,
 5 lisuride, oxymetholone, tamoxifen, progesterone,
 mepitiostane, epitio Stanol, formestane, interferon-
 alpha, interferon-2 alpha, interferon-beta,
 interferon-gamma, colony stimulating factor-1,
 colony stimulating factor-2, denileukin diftitox,
 10 interleukin-2, and leutinizing hormone releasing
 factor.

61. A kit according to Claim 58, wherein the
 15 chemotherapeutic agent is selected from the group
 consisting of mitomycin, tretinoin, ribomustin,
 gemcitabine, vincristine, etoposide, cladribine,
 mitobronitol, methotrexate, doxorubicin, carboquone,
 pentostatin, nitracrine, zinostatin, cetorelix,
 letrozole, raltitrexed, daunorubicin, fadrozole,
 20 fotemustine, thymalfasin, sobuzoxane, nedaplatin,
 cytarabine, bicalutamide, vinorelbine, vesnarinone,
 aminogluthethimide, amsacrine, proglumide,
 elliptinium acetate, ketanserine, doxifluridine,
 etretinate, isotretinoin, streptozocin, nimustine,
 25 vindesine, flutamide, drogenil, butocin, carmofur,
 razoxane, sizofilan, carboplatin, mitolactol,
 tegafur, ifosfamide, prednimustine, picibanil,
 levamisole, teniposide, improsulfan, enocitabine,
 and lisuride.

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 62. A kit according to Claim 58 wherein the
 chemotherapeutic agent is selected from the group
 consisting of oxymetholone, tamoxifen, progesterone,
 mepitiostane, epitio Stanol, and formestane.

35
 63. A kit according to Claim 58 wherein the
 chemotherapeutic agent is selected from the group
 consisting of interferon-alpha, interferon-2 alpha,

interferon-beta, interferon-gamma, colony stimulating factor-1, colony stimulating factor-2, denileukin diftitox, interleukin-2, and leutinizing hormone releasing factor.

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64. A kit according to Claim 58, wherein radiosensitizer agent is selected from the group consisting of 2-(3-nitro-1,2,4-triazol-1-yl)-N-(2-methoxyethyl)acetamide, N-(3-nitro-4-quinolinyl)-4-morpholinecarboxamidine, 3-amino-1,2,4-benzotriazine-1,4-dioxide, N-(2-hydroxyethyl)-2-nitroimidazole-1-acetamide, 1-(2-nitroimidazol-1-yl)-3-(1-piperidinyl)-2-propanol, and 1-(2-nitro-1-imidazolyl)-3-(1-aziridino)-2-propanol.

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65. A therapeutic metallopharmaceutical composition according to claim 11, wherein the metallopharmaceutical is a therapeutic radiopharmaceutical, further comprising at least one agent selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof.

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66. A therapeutic metallopharmaceutical composition according to claim 65, wherein the chemotherapeutic agent is selected from the group consisting of mitomycin, tretinoin, ribomustin, gemcitabine, vincristine, etoposide, cladribine, mitobronitol, methotrexate, doxorubicin, carboquone, pentostatin, nitracrine, zinostatin, cetorelix, letrozole, raltitrexed, daunorubicin, fadrozole, fotemustine, thymalfasin, sobuzoxane, nedaplatin, cytarabine, bicalutamide, vinorelbine, vesnarinone, aminoglutethimide, amsacrine, proglumide, elliptinium acetate, ketanserin, doxifluridine, etretinate, isotretinoin, streptozocin, nimustine, vindesine, flutamide, drogenil, butocin, carmofur, razoxane, sizofilan, carboplatin, mitolactol,

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tegafur, ifosfamide, prednimustine, picibanil, levamisole, teniposide, improsulfan, enocitabine, lisuride, oxymetholone, tamoxifen, progesterone, mepitiostane, epitio stanol, formestane, interferon-alpha, interferon-2 alpha, interferon-beta, interferon-gamma, colony stimulating factor-1, colony stimulating factor-2, denileukin diftitox, interleukin-2, and leutinizing hormone releasing factor.

67. A therapeutic metallopharmaceutical composition according to claim 65, wherein radiosensitizer agent is selected from the group consisting of 2-(3-nitro-1,2,4-triazol-1-yl)-N-(2-methoxyethyl)acetamide, N-(3-nitro-4-quinolinyl)-4-morpholinecarboxamide, 3-amino-1,2,4-benzotriazine-1,4-dioxide, N-(2-hydroxyethyl)-2-nitroimidazole-1-acetamide, 1-(2-nitroimidazol-1-yl)-3-(1-piperidinyl)-2-propanol, and 1-(2-nitro-1-imidazolyl)-3-(1-aziridino)-2-propanol.

68. A method of treating cancer in a patient comprising: administering to a patient in need thereof a therapeutic radiopharmaceutical of Claim 19 or a pharmaceutically acceptable salt thereof, and at least one agent selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof.

69. A method of treating cancer according to claim 68, wherein the administration is by injection or infusion.

70. A method according to claim 68 wherein administering the therapeutic radiopharmaceutical and agent is concurrent.

71. A method according to claim 68 wherein administering the therapeutic radiopharmaceutical and agent is sequential.
- 5 72. A method according to claim 68 wherein the cancer is selected from the group consisting of carcinomas of the lung, breast, ovary, stomach, pancreas, larynx, esophagus, testes, liver, parotid, biliary tract, colon, rectum, cervix, uterus, endometrium, kidney, bladder, prostate, thyroid, squamous cell carcinomas, adenocarcinomas, small cell carcinomas, melanomas, gliomas, and neuroblastomas.
- 10
73. A method according to claim 68 wherein the chemotherapeutic agent is selected from the group consisting of mitomycin, tretinoin, ribomustin, gemcitabine, vincristine, etoposide, cladribine, mitobronitol, methotrexate, doxorubicin, carboquone, pentostatin, nitracrine, zinostatin, cetorelix, letrozole, raltitrexed, daunorubicin, fadrozole, fotemustine, thymalfasin, sobuzoxane, nedaplatin, cytarabine, bicalutamide, vinorelbine, vesnarinone, aminogluthethimide, amsacrine, proglumide, elliptinium acetate, ketanserin, doxifluridine, etretinate, isotretinoin, streptozocin, nimustine, vindesine, flutamide, drogenil, butocin, carmofur, razoxane, sizofilan, carboplatin, mitolactol, tegafur, ifosfamide, prednimustine, picibanil, levamisole, teniposide, improsulfan, enocitabine, lisuride, oxymetholone, tamoxifen, progesterone, mepitiostane, epitiostanol, formestane, interferon-alpha, interferon-2 alpha, interferon-beta, interferon-gamma, colony stimulating factor-1, colony stimulating factor-2, denileukin diftotox, interleukin-2, and leutinizing hormone releasing factor.
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74. A method according to claim 68 wherein the radiosensitizer agent is selected from the group consisting of 2-(3-nitro-1,2,4-triazol-1-yl)-N-(2-methoxyethyl)acetamide, N-(3-nitro-4-quinolinyl)-4-morpholinecarboxamide, 3-amino-1,2,4-benzotriazine-1,4-dioxide, N-(2-hydroxyethyl)-2-nitroimidazole-1-acetamide, 1-(2-nitroimidazol-1-yl)-3-(1-piperidinyl)-2-propanol, and 1-(2-nitro-1-imidazolyl)-3-(1-aziridino)-2-propanol.
- 10
75. A process for the preparation of diagnostic or therapeutic metallopharmaceutical composition, said process comprising generating a macrostructure from a plurality of molecular components wherein the plurality of components includes a targeting moiety and a chelator, wherein the targeting moiety is a indazole nonpeptide, which is bound to the chelator, and binds to a receptor that is upregulated during angiogenesis and the compound has 0-1 linking groups between the targeting moiety and chelator.
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